



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

## Header 3

List View

### General Information

Contact

Default Values

Discount

Document Information

Procurement Folder: 317430

SO Doc Code: CRFQ

Procurement Type: Central Purchase Order

SO Dept: 1400

Vendor ID: 000000226955

SO Doc ID: AGR1700000016

Legal Name: AGILENT TECHNOLOGIES INC

Published Date: 5/1/17

Alias/DBA:

Close Date: 5/18/17

Total Bid: \$122,526.49

Close Time: 13:30

Response Date: 05/18/2017

Status: Closed

Response Time: 12:59

Solicitation Description: Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

Total of Header Attachments: 3

Total of All Attachments: 3





Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Solicitation Response

Proc Folder : 317430

Solicitation Description : Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2017-05-18 13:30:00	SR 1400 ESR05181700000005674	1

**VENDOR**

000000226955

AGILENT TECHNOLOGIES INC

Solicitation Number: CRFQ 1400 AGR1700000016

Total Bid : \$122,526.49

Response Date: 2017-05-18

Response Time: 12:59:46

**Comments:** Agilent Technologies, Inc. (Agilent) is pleased to respond to the above referenced Solicitation with 2 separate proposals. Agilent can Meet and Exceed all of the specifications In Section 3 General Requirements of the RFQ with both our Model 7800 and 7900 ICPMS Systems. The highly competitive proposal for the Agilent 7800 system is sufficient to meet and exceed as explained in the detailed Technical Response to the specifications. The Agilent 7900 System will also meet and greatly exceed all of the specifications however we believe that the world's bestselling 7900 ICP-MS, which has become the instrument of choice for the large majority of all environmental laboratories nationwide, offers greatly enhanced value for the modest increase in price as demonstrated in the separate detailed Technical Response for the 7900 System. We ask you to please evaluate both proposals and feel free to contact Agilent if you would like more clarification.

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
(304) 558-2544  
tara.l.lyle@wv.gov

Signature on File

FEIN #

DATE

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	ICP-MS Autosampler, computer, software	1.00000	EA	\$110,558.490000	\$110,558.49

Comm Code	Manufacturer	Specification	Model #
41000000			

Extended Description :	ICP-MS Autosampler, computer, software

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Shipping Charges & Inside Delivery	1.00000	EA	\$0.000000	\$0.00

Comm Code	Manufacturer	Specification	Model #
78121603			

Extended Description :	Shipping Charges & Inside Delivery

**Comments:**
Included in Item 1

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Installation/Validation	1.00000	EA	\$0.000000	\$0.00

Comm Code	Manufacturer	Specification	Model #
73171605			

Extended Description :	Installation/Validation

**Comments:**
Included in Item 1

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Training/Warranty	1.00000	EA	\$7,828.000000	\$7,828.00

Comm Code	Manufacturer	Specification	Model #
73171605			

Extended Description :	Training/Warranty

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Preventative maintenance	1.00000	EA	\$4,140.000000	\$4,140.00

Comm Code	Manufacturer	Specification	Model #
81101706			

Extended Description :	Preventative maintenance
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**Agilent Technologies**

Agilent Technologies, Inc. 800 227 9770 telephone  
LSCA Customer Sales and Service 2850 302 993 5941 facsimile  
Centerville Road, MS 3N3 Wilmington, www.agilent.com  
DE 19808

May 18, 2017

via WVOASIS: [Tara..L.Lyle@wv.gov](mailto:Tara..L.Lyle@wv.gov)

State of West Virginia  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130  
Attn: Tara Lyle

Reference: **Solicitation No. CRFQ 1400 AGR1700000016**

Agilent Technologies, Inc. (Agilent) is pleased to respond to the above referenced Solicitation with 2 separate proposals. Agilent can Meet and Exceed **all** of the specifications In Section 3 General Requirements of the RFQ with **both** our Model 7800 and 7900 ICPMS Systems. The highly competitive proposal for the Agilent 7800 system is sufficient to meet and exceed as explained in the detailed Technical Response to the specifications.

The Agilent 7900 System will also meet and **greatly** exceed **all** of the specifications however we believe that the world's bestselling 7900 ICP-MS, which has become the instrument of choice for the large majority of all environmental laboratories nationwide, offers greatly enhanced value for the modest increase in price as demonstrated in the separate detailed Technical Response for the 7900 System.

We ask you to please evaluate both proposals and feel free to contact Agilent if you would like more clarification.

Agilent is bidding in accordance with the attached quotations **2290454** for the 7800 and **2290536** for the 7900, which are hereby incorporated by reference. Please reference the Quotation number on any award. The terms and conditions of this proposal and for any resulting order shall be subject to Agilent's standard Terms of Sale, Exhibit E16 which is attached and hereby incorporated by reference.

If you have questions regarding Agilent's products listed on the Technical Response, please contact Rick Browning at 304-840-4752. If you have other questions regarding Agilent's response, please contact the undersigned at 302-636-8071.

Sincerely yours,  
Agilent Technologies, Inc.

Tom Fenton  
Bids Technical Response Specialist



**Agilent Technologies**

Agilent Technologies, Inc. 800 227 9770 telephone  
LSCA Customer Sales and Service 2850 302 993 5941 facsimile  
Centerville Road, MS 3N3 Wilmington, www.agilent.com  
DE 19808

May 18, 2017

via WVOASIS: [Tara..L.Lyle@wv.gov](mailto:Tara..L.Lyle@wv.gov)

State of West Virginia  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130  
Attn: Tara Lyle

Reference: **Solicitation No. CRFQ 1400 AGR1700000016**

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Sincerely yours,  
Agilent Technologies, Inc.

Tom Fenton  
Bids Technical Response Specialist



Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Request for Quotation  
13 — Equipment

Proc Folder: 317430

Doc Description: Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-05-01	2017-05-18 13:30:00	CRFQ 1400 AGR1700000016	1

**BID RECEIVING LOCATION**

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

**VENDOR**

Vendor Name, Address and Telephone Number:

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
(304) 558-2544  
tara.l.lyle@wv.gov

Signature X

FEIN #

DATE

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

The West Virginia Purchasing Division for the agency, the West Virginia Department of Agriculture, is soliciting bids for a one-time purchase of an Inductively Coupled Plasma Mass Spectrometry (ICP-MS), workstation PC, and software with shipping, installation, validation, warranty, training, and service, per the attached documentation.

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E  CHARLESTON WV25305-0173  US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11  CHARLESTON WV 25312  US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	ICP-MS Autosampler, computer, software	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
41000000			

**Extended Description :**

ICP-MS Autosampler, computer, software

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E  CHARLESTON WV25305-0173  US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11  CHARLESTON WV 25312  US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Shipping Charges & Inside Delivery	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
78121603			

**Extended Description :**

Shipping Charges &amp; Inside Delivery

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E  CHARLESTON WV25305-0173  US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11  CHARLESTON WV 25312  US	



Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Installation/Validation	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
73171605			

Extended Description :  
Installation/Validation

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E CHARLESTON WV25305-0173 US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11 CHARLESTON WV 25312 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Training/Warranty	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
73171605			

Extended Description :  
Training/Warranty

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E CHARLESTON WV25305-0173 US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11 CHARLESTON WV 25312 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
5	Preventative maintenance	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
81101706			

Extended Description :  
Preventative maintenance

#### SCHEDULE OF EVENTS

Line	Event	Event Date
1	Technical questions due by 4:00 pm	2017-05-09

<b>AGR1700000016</b>	<b>Document Phase</b> <b>Draft</b>	<b>Document Description</b> Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	<b>Page 4</b> <b>of 4</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

## INSTRUCTIONS TO VENDORS SUBMITTING BIDS

**1. REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

**2. MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

**3. PREBID MEETING:** The item identified below shall apply to this Solicitation.

☒ A pre-bid meeting will not be held prior to bid opening

☐ A **NON-MANDATORY PRE-BID** meeting will be held at the following place and time:

☐ A **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

**4. VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: May 9, 2017 by 4:00 pm

Submit Questions to: Tara Lyle

2019 Washington Street, East

Charleston, WV 25305

Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)

Email: [Tara.L.Lyle@wv.gov](mailto:Tara.L.Lyle@wv.gov)

**5. VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

**6. BID SUBMISSION:** All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID:  
BUYER:  
SOLICITATION NO.:  
BID OPENING DATE:  
BID OPENING TIME:  
FAX NUMBER:

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression of Interest or Request for Proposal is not permitted in wvOASIS.

**For Request For Proposal ("RFP") Responses Only:** In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus N/A convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: (This only applies to CRFP)

- ☐ Technical  
☐ Cost

**7. BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: May 18, 2017 at 1:30 pm

Bid Opening Location: Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

**8. ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

**9. BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

**10. ALTERNATES:** Any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

**11. EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

**12. COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

**13. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

**14. UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

**15. PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Vendor Preference Certificate form has been attached hereto to allow Vendor to apply for the preference. Vendor's failure to submit the Vendor Preference Certificate form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

**16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

**17. WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

**18. ELECTRONIC FILE ACCESS RESTRICTIONS:** Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

**19. NON-RESPONSIBLE:** The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance.”

**20. ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b.”



**21. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

## **GENERAL TERMS AND CONDITIONS:**

**1. CONTRACTUAL AGREEMENT:** Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☐ **Term Contract**

**Initial Contract Term:** This Contract becomes effective on \_\_\_\_\_ and extends for a period of \_\_\_\_\_ year(s).

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to \_\_\_\_\_ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed \_\_\_\_\_ months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within \_\_\_\_\_ days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days.

Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional \_\_\_\_\_ successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed \_\_\_\_\_ months in total. Automatic renewal of this Contract is prohibited.

☒ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached.

**4. NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☒ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

**7. REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☐ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of \_\_\_\_\_. The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

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The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

**8. INSURANCE:** The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. Subsequent to contract award, and prior to the insurance expiration date, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies mandated herein, including but not limited to, policy cancelation, policy reduction, or change in insurers. The insurance coverages identified below must be maintained throughout the life of this contract. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed in this section.

Vendor must maintain:

☐ **Commercial General Liability Insurance** in at least an amount of:

\_\_\_\_\_  
\_\_\_\_\_

☐ **Automobile Liability Insurance** in at least an amount of: \_\_\_\_\_

☐ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of:

\_\_\_\_\_

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of:

\_\_\_\_\_

☐ **Cyber Liability Insurance** in an amount of: \_\_\_\_\_

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

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**9. WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

**10. LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

**11. LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount of

for \_\_\_\_\_.

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

**12. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

**13. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

**14. PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.

**15. PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

☐ Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.



**16. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

**17. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

**18. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

**19. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-6.1.e.

**20. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.

**21. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

**22. COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

**23. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

**24. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

Revised 04/07/2017

**25. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

**26. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

**27. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

**28. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

**29. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

**30. BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

**31. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

**32. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**33. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

**34. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

**35. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.



Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

**36. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

**37. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

**38. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

**39. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

**40. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

**41. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☐ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.requisitions@wv.gov](mailto:purchasing.requisitions@wv.gov).

**42. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**43. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

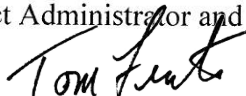
**44. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.



**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

 Bids Response Technical Specialist

(Name, Title)

Tom Fenton, Bids Response Technical Specialist

(Printed Name and Title)

2850 Centerville Rd., Wilmington, DE 19808

(Address)

800-227-9770 / 302-993-5941

(Phone Number) / (Fax Number)


LSCABids@agilent.com

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Agilent Technologies, Inc

(Company)



(Authorized Signature) (Representative Name, Title)

Tom Fenton, Bids Response Technical Specialist

(Printed Name and Title of Authorized Representative)

17MAY2017

(Date)

800-227-9770 302-993-5941

(Phone Number) (Fax Number)

REQUEST FOR QUOTATION  
CRFQ AGR1700000016  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**SPECIFICATIONS**

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Department of Agriculture to establish a contract for the one-time purchase of an **Inductively Coupled Plasma Mass Spectrometry (ICP-MS), workstation PC, and software with shipping, installation, validation, warranty, training, and service.**
2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
  - 2.1 **“Contract Services”** means the ICP-MS with inside delivery, installation, validation, warranty, and training.
  - 2.2 **“Deliverables”** means all items being purchased through this RFQ.
  - 2.3 **“Preventative Maintenance Plan”** means routine service conducted by the Vendor that is recommended to keep the instrument fully operational.
  - 2.4 **“Pricing Page”** means the pages, contained in wvOASIS or attached as Exhibit A, upon which Vendor should list its proposed price for the Contract Items.
  - 2.5 **“Solicitation”** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
  - 2.6 **“Validation”** means is the process used to confirm that the analytical procedure employed for a specific test or matrices is suitable for its intended use.
  - 2.7 **“Installation”** means unpacking and setting instrumentation in place with all connections secured for the instrument(s) to be in working order including software installation on the computer connected to the instrument.
  - 2.8 **“Warranty”** means the written warranty of the manufacturer of a new instrument of its condition and fitness for use, including any terms or conditions precedent to the enforcement of obligations under that warranty.
  - 2.9 **“Training”** means teaching staff on-site on how to use, and maintain the instrument and software.
  - 2.10 **“Service”** means performing routine maintenance work or repair to the instrument or software.

REQUEST FOR QUOTATION  
CRFQ AGR1700000016  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**3. GENERAL REQUIREMENTS:**

**3.1 Mandatory Contract Item Requirements:** Contract Item must meet or exceed the mandatory requirements listed below for the **Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**.

**3.1.1 Inductively Coupled Plasma Mass Spectrometry (ICP-MS).**

- 3.1.1.1 The ICP-MS must have an RF (radio frequency) plasma ion source, a quadrupole based universal cell, a quadrupole mass filter, a quadrupole ion deflector, dual stage discrete dynode detector, a triple cone interface and all under computer control. Additional equipment required is an autosampler (60 sample minimum), computer, monitor, and software for the quantitation of metals.
- 3.1.1.2 ICP-MS must be equipped with universal cell technology able to operate in standard mode, collision mode, and reaction mode.
- 3.1.1.3 Must be capable of detecting trace metals in matrices such as foods, soil, vegetation, animal feed, fertilizer and water.
- 3.1.1.4 The quadrupole must be able to scan a minimum of 5000 amu/sec.
- 3.1.1.5 High mass range must be 285 amu or greater.
- 3.1.1.6 Must have full compliance or exceed performance of US EPA methodology for Method 200.8; Method SW 846-6020; FDA Forensic Chemistry Center SOP T026 (002); AOAC 968.08D; AOAC 985.01; AOAC 2006.03; AOAC 965.09; AOAC 982.01.
- 3.1.1.7 The instrument operates in helium collision cell mode to eliminate interference for isobaric polyatomic species via kinetic energy discrimination.
- 3.1.1.8 Tuning for low oxide and low double charged species is important for minimizing interference.
- 3.1.1.9 Capable to switch between hydrogen and helium reaction gas
- 3.1.1.10 All analytical system operations from component optimization to methods development, calibration, analysis and to reports must be able to be performed using a single software program.
- 3.1.1.11 System must have a full color plasma view window for useful visuals on the sampler cone, plasma color and injector tip.

REQUEST FOR QUOTATION  
**CRFQ AGR1700000016**  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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- 3.1.2.2 Capable of manually entering weights, volumes and a unique run label.
- 3.1.2.3 Automatically calculates dilution factor.
- 3.1.2.4 Operating system must be fully integrated to control ICP-MS.
- 3.1.2.5 Software updates will be provided at no additional cost.
- 3.1.2.6 Computer includes mouse, minimum 19 inch color monitor, keyboard, DVD-RW drive, at least 2 USB ports, and printing capabilities.

**3.1.3 Shipping**

- 3.1.3.1 Equipment must be delivered within 90 Days after receipt of order.
- 3.1.3.2 The bidder must explain the details of its proposed packaging sizes for the deliverable(s). All equipment must be packaged and capable of fitting through access doors.

**3.1.4 Installation**

- 3.1.4.1 Vendor must be on-site for delivery and perform the installation (labor and supplies included) of the ICP-MS.
- 3.1.4.2 The vendor must provide a written validation of the instrument's performance after installation.
- 3.1.4.3 Installation shall be performed by the Vendor who shall agree to have an adequate number of trained staff and materials within 30 days of completion of the installation checklist.

**3.1.5 Validation**

- 3.1.5.1 The vendor must provide a written validation of the instrument's performance after installation.

**3.1.6 Warranty**

- 3.1.6.1 Vendor will provide a full one-year parts and labor warranty on all items, including preventative maintenances that are recommended by the Vendor's preventative maintenance service plans.

REQUEST FOR QUOTATION  
**CRFQ AGR1700000016**  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**3.1.7 Training**

- 3.1.7.1 Vendor will provide on-site training (labor and non-consumable supplies included) for all instruments and software.

**3.1.8 Preventative Maintenance**

- 3.1.8.1 Preventative maintenance services shall be performed by the Vendor who shall agree to have an adequate number of trained staff and replacement parts available in order to comply with the requirements in 3.1.8.2 and 3.1.8.3.
- 3.1.8.2 Vendor must respond to service calls within 24 hours.
- 3.1.8.3 Vendor must be capable of performing all requests for repairs and/or service within three business days of request.
- 3.1.8.4 After any preventative maintenance or repairs have been completed on a particular instrument, the Vendor shall guarantee the accuracy and precision of the instrument at the location where the instrument will be used.
- 3.1.8.5 Reports of service will be signed by State of WV authorized laboratory personnel to ensure work has been completed.

**4. CONTRACT AWARD:**

**4.1 Contract Award:** The Contract is intended to provide Agencies with a purchase price for the Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.

**4.2 Pricing Page:** Vendor should complete the Pricing Page by placing all inclusive information in each column for item number, model/brand name, unit price and extended amount. There should be a price for the ICP-MS, autosampler, workstation, software, shipping/inside delivery, installation, validation, warranty, there is no charge for any deliverable, indicate in the cell with "no charge". The bidder/vendor information must be completed and include an authorize signature. Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified.

Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.



REQUEST FOR QUOTATION  
CRFQ AGR1700000016  
Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument

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**5. PAYMENT:**

**5.1 Payment:** Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

**6. DELIVERY AND RETURN:**

**6.1 Shipment and Delivery:** Vendor should ship the Contract Items within 90 days after being awarded this Contract and receiving a purchase order or notice to proceed. Contract Items must be delivered to Agency at 313 Gus R. Douglass Lane, Charleston, WV 25312.

**6.2 Late Delivery:** The Agency placing the order under this Contract must be notified in writing if the shipment of the Contract Items will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the Contract, and/or obtaining the Contract Items from a third party.

Any Agency seeking to obtain the Contract Items from a third party under this provision must first obtain approval of the Purchasing Division.

**6.3 Delivery Payment/Risk of Loss:** Vendor shall deliver the Contract Items F.O.B. destination to the Agency's location.

**6.4 Return of Unacceptable Items:** If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

**6.5 Return Due to Agency Error:** Items ordered in error by the Agency will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

**REQUEST FOR QUOTATION**  
**CRFQ AGR1700000016**  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**7 VENDOR DEFAULT:**

7.1 The following shall be considered a vendor default under this Contract.

7.1.1 Failure to provide Contract Items in accordance with the requirements contained herein.

7.1.2 Failure to comply with other specifications and requirements contained herein.

7.1.3 Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

7.1.4 Failure to remedy deficient performance upon request.

7.2 The following remedies shall be available to Agency upon default.

7.2.1 Immediate cancellation of the Contract.

7.2.2 Immediate cancellation of one or more release orders issued under this Contract.

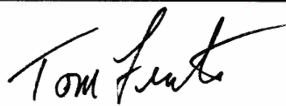
7.2.3 Any other remedies available in law or equity.

**8 FACILITIES ACCESS:** Performance of Services will require access to the facility.

8.1 Vendor must identify principal service personnel who will be asked for identification upon entrance to the facility.

8.2 Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

**CRFQ AGR1700000016 - PRICING PAGE**

Item No.	Description	Model No/Brand Name	Quantity	Unit Price	Extended Amount
3.1.1	ICP-MS, autosampler,computer, software	Agilent 7800 ICP-MS with Data System, Software and SPS-4 Autosampler	1 ea		\$110,558.49
3.1.1	Shipping charges and inside delivery	Included with Item 3.1.1	1 ea	0.00	\$0.00
3.1.4	Installation/validation	Included with Item 3.1.1	1 ea	\$0.00	\$0.00
3.1.7	Training/warranty		1 ea	\$7,828.00	\$7,828.00
3.1.8	Preventative maintenance		1 ea	\$4,140.00	\$4,140.00
	Failure to use this form may result in disqualification			OVERALL	
	Bidder / Vendor Information			TOTAL COST:	122,526.49
Name:	AGILENT TECHNOLOGIES, INC.				
Address:	2850 CENTERVILLE RD.				
	WILMINGTON,DE 19808				
Phone:	800-227-9770				
Email Address:	LSCABids@agilent.com				
Authorized Signature:	 Tom Fenton, Bids Response Technical Specialist				



STATE OF WEST VIRGINIA  
Purchasing Division

## PURCHASING AFFIDAVIT

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: AGILENT TECHNOLOGIES, INC.

Authorized Signature:  Date: 17MAY2017

State of Delaware

County of New Castle, to-wit:

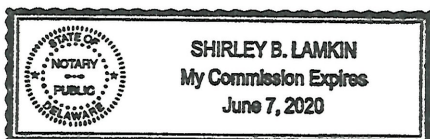
Taken, subscribed, and sworn to before me this 17 day of May, 2017.

My Commission expires June 7, 2020.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** 

*Purchasing Affidavit (Revised 08/01/2015)*





## State of West Virginia

**VENDOR PREFERENCE CERTIFICATE**

Certification and application is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

**1. Application is made for 2.5% vendor preference for the reason checked:**

- ☐ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
- ☐ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
- ☐ Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or**,
- ☐ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,

**2. Application is made for 2.5% vendor preference for the reason checked:**

- ☐ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

**3. Application is made for 2.5% vendor preference for the reason checked:**

- ☐ Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or**,

**4. Application is made for 5% vendor preference for the reason checked:**

- ☐ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,

**5. Application is made for 3.5% vendor preference who is a veteran for the reason checked:**

- ☐ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,

**6. Application is made for 3.5% vendor preference who is a veteran for the reason checked:**

- ☐ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

**7. Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.**

- ☐ Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

**Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.**

Bidder: \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

\*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

Brenda Keavey  
West Virginia Department of  
Agriculture  
4720 Brenda Lane Bldg 11  
CHARLESTON WV 25312-9301

TEL: 304 558 2208 FAX: 304 558 3594

## Quotation

Quote No.	Create Date	Delivery Time	Page
2290454	05/15/2017	7 Weeks	1 of 8
Contact	Phone no.	Valid to	
Rick Browning	304-840-4752	07/14/2017	
To place an order: Call 1-800-227-9770 Option 1			
For Instruments Fax : 302-633-8953			
Email : LSCAinstrumentsales@agilent.com			
For Consumables Fax : 302-633-8901			
Email : CAG_sales-NA@agilent.com			
For Genomics Fax: 512-321-3128			
Email : orders@agilent.com			
For additional instructions, see last page			

CRFQ 1400 AGR1700000016 18MAY2017

Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
<b>G8421A</b>  Agilent 7800 ICP-MS mainframe with He cell gas line  With the following configuration: Ship-to Country : USA  Installation (44K) Familiarization at Installation (44L)  Special discount of 45.00 % is applied.	1.000 EA	168,393.00 USD	75,776.85-	92,616.15
<b>G7215C</b>  ICP-MS Workstation PC bundle for 7700, 7800, 7900, 8800 and 8900. Includes PC, Windows 7 64 bit OS, Monitor and Printer but does not include ICP-MS MassHunter software license for ICP-MS instrument if either of option #001-#005 is not selected.  With the following configuration: Ship-to Country : USA MassHunter Software For 7800 ICP-MS Installation (44K) 1 Year SW Update/Phone Assist (44W)  Special discount of 45.00 % is applied.	1.000 EA	13,709.00 USD	6,169.05-	7,539.95
<b>G7206C</b>	1.000 EA	3,041.00 USD	1,368.45-	1,672.55

Brenda Keavey  
 West Virginia Department of  
 Agriculture  
 4720 Brenda Lane Bldg 11  
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2290454	05/15/2017	7 Weeks	2 of 8
Contact	Phone no.	Valid to	
Rick Browning	304-840-4752	07/14/2017	
To place an order: Call 1-800-227-9770 Option 1 For Instruments Fax : 302-633-8953 Email : LSCAinstrumentsales@agilent.com For Consumables Fax : 302-633-8901 Email : CAG_sales-NA@agilent.com For Genomics Fax: 512-321-3128 Email : orders@agilent.com For additional instructions, see last page			

Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
ICP-MS MassHunter Intelligent Sequence Software option. Provides comprehensive real-time QC, action on failure and reporting functions for compliance with US EPA and similiar requirements for 7700, 7800, 7900, 8800 and 8900.  With the following configuration: Ship-to Country : USA  Installation (44K) Familiarization at Installation (44L)  Special discount of 45.00 % is applied.				
<b>5185-5850</b>	1.000 EA	<b>613.00 USD</b>	<b>275.85-</b>	<b>337.15</b>
ICP-MS Checkout Solutions Installation checkout solutions kit required by the Agilent installation engineer to validate the Agilent 7700 performance on site. Contains tuning solution, dual mode (1), dual mode(2), wash and water blank solutions  Special discount of 45.00 % is applied.				
<b>G1879B</b>	1.000 EA	<b>1,717.00 USD</b>	<b>772.65-</b>	<b>944.35</b>
Heat exchanger PolyScience Model 3370 Air Cooled Recirculator				

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## Quotation

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2290454	05/15/2017	7 Weeks	3 of 8
Contact	Phone no.	Valid to	
Rick Browning	304-840-4752	07/14/2017	
To place an order: Call 1-800-227-9770 Option 1 For Instruments Fax : 302-633-8953 Email : LSCAinstrumentsales@agilent.com For Consumables Fax : 302-633-8901 Email : CAG_sales-NA@agilent.com For Genomics Fax: 512-321-3128 Email : orders@agilent.com For additional instructions, see last page			

Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
With the following configuration: Ship-to Country : USA  Special discount of 45.00 % is applied.				
<b>CP17976</b>	1.000 EA	<b>618.00 USD</b>	<b>278.10-</b>	<b>339.90</b>
Gas Clean Carrier Gas filter kit (includes 1 connecting unit 1/8" and 2 Carrier Gas filters)				
Special discount of 45.00 % is applied.				
<b>8710-1709</b>	1.000 EA	<b>32.30 USD</b>	<b>14.54-</b>	<b>17.76</b>
Cutter, tube				
Special discount of 45.00 % is applied.				
<b>G3270-65035</b>	1.000 EA	<b>204.00 USD</b>	<b>91.80-</b>	<b>112.20</b>
Stainless steel tubing, 1/8in od, 6m. Used for For external cell gas line				

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For Consumables Fax : 302-633-8901			
Email : CAG_sales-NA@agilent.com			
For Genomics Fax: 512-321-3128			
Email : orders@agilent.com			
For additional instructions, see last page			

Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
Special discount of 45.00 % is applied.				
<b>CP7981</b>	1.000 EA	<b>41.15 USD</b>	<b>18.52-</b>	<b>22.63</b>
Wall Mounting Bracket, Gas Clean Wall Mounting Bracket for 1-position connecting unit only				
Special discount of 45.00 % is applied.				
<b>0101-1536</b>	1.000 EA	<b>342.00 USD</b>	<b>153.90-</b>	<b>188.10</b>
Gas regulator, Helium for ICP-MS. 2 stage, brass body, stainless steel diaphragm, CGA580 Inlet 3000psi, 15psi outlet, 30psi gauge + 1/8" Swagelok.				
Special discount of 45.00 % is applied.				
<b>G8415A</b>	1.000 EA	<b>12,305.00 USD</b>	<b>5,537.25-</b>	<b>6,767.75</b>
SPS 4 autosampler for ICP-MS products. Optional cover kit not included.  With the following configuration: Integrated Cover Kit (002) : Selected Extraction Duct Hosing (003) : Selected Dual Port Reservoir Kit (004) : Selected Ship-to Country : USA SPS 4 Integrated cover kit				



## Agilent Technologies

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West Virginia Department of  
Agriculture  
4720 Brenda Lane Bldg 11  
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TEL: 304 558 2208 FAX: 304 558 3594

## Quotation

Quote No.	Create Date	Delivery Time	Page
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Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
<del>Duct Hose 50mm-id</del> SPS 4 Dual Port Reservoir Kit Installation (44K) Familiarization at Installation (44L)  Special discount of 45.00 % is applied.				
<b>H2149A</b>	1.000 EA	<b>9,785.00 USD</b>	<b>1,957.00-</b>	<b>7,828.00</b>
Method and Application Consulting On-site consulting for a maximum of 4 participants. Certificates and manuals not included.  With the following configuration: Ship-to Country : USA Three Day On-site (Includes Travel)  Special discount of 20.00 % is applied.				
<b>SYS-IM-7900</b>	1.000 EA	<b>5,175.00 USD</b>	<b>1,035.00-</b>	<b>4,140.00</b>
ICPMS 7900 System  With the following configuration: Ship-to Country : USA  CrossLab Preventive Maintenance  Special discount of 20.00 % is applied.				



TEL: 304 558 2208    FAX: 304 558 3594

Quote No.	Create Date	Delivery Time	Page
2290454	05/15/2017	7 Weeks	6 of 8
Contact	Phone no.	Valid to	
Rick Browning	304-840-4752	07/14/2017	
<p>To place an order: Call 1-800-227-9770 Option 1</p> <p>For Instruments Fax : 302-633-8953</p> <p>Email : LSCAinstrumentsales@agilent.com</p> <p>For Consumables Fax : 302-633-8901</p> <p>Email : CAG_sales-NA@agilent.com</p> <p>For Genomics Fax : 512-321-3128</p> <p>Email : orders@agilent.com</p> <p>For additional instructions, see last page</p>			

Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
		Gross Amount	: \$	215,975.45
		Total Discount	: \$	93,448.96
		Net Amount	: \$	122,526.49
		<b>Total</b>	<b>: \$</b>	<b>122,526.49</b>



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Quote No.	Create Date	Delivery Time	Page
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Rick Browning	304-840-4752	07/14/2017	
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For Instruments Fax : 302-633-8953			
Email : LSCAinstrumentsales@agilent.com			
For Consumables Fax : 302-633-8901			
Email : CAG_sales-NA@agilent.com			
For Genomics Fax: 512-321-3128			
Email : orders@agilent.com			
For additional instructions, see last page			

**TO PLACE AN ORDER, Agilent offers several options:**

- 1) Visit <http://www.agilent.com/chem/supplies> to place online orders using a purchase order or credit card.
- 2) Call 1-800-227-9770 (option 1) any weekday between 8am and 8 pm Eastern time in the U.S., Canada & Puerto Rico.
- 3) To place an order for Consumables, please fax the order to 302-633-8901.  
To place an instrument and/or software order, please fax the order to 302-633-8953.  
To place an order for Genomics, please fax the order to 512-321-3128, or email to orders@agilent.com
- 4) Or you can mail your order to:  
Agilent Technologies  
North American Customer Contact Center  
2850 Centerville Road BU3-2  
Wilmington, DE 19808-1610

**To place an order, the following information is required:**

- Purchase order number or credit card, delivery date, ship to, invoice to, end user, and quote number.
- GSA customers please provide GSA contract #.

**EXCLUSIVE OFFERS FOR NEW INSTRUMENT CUSTOMERS**, go to [www.agilent.com/chem/exclusiveoffers](http://www.agilent.com/chem/exclusiveoffers)

**TO CHECK THE STATUS OF AN ORDER:**

- 1) Visit <http://www.agilent.com/chem/supplies> to check the status of your order.
- 2) Call 1-800-227-9770 (option 1) any weekday between 8 am and 8 pm Eastern time, in the U.S., Canada & Puerto Rico. You will need to know the purchase order or credit card number the order was placed on.

**FINANCING AND LEASING** - A wide range of options are available. For more information or to discuss how monthly payments could suit your operational or budgetary requirements, contact your Agilent Account Manager.

**TERMS AND CONDITIONS:**

- Pricing: Web prices are provided only for the U.S. in U.S.dollars. All phone prices are in local currency and for end use. Applicable local taxes are applied.
- All Sales Tax is subject to change at the time of order.
- Shipping and Handling Charges: Orders with a value less than \$4000 or those requiring special services such as overnight delivery may be subject to additional shipping & handling fees. Some of these charges may be avoided by ordering via the Web
- Payment Terms: Net 30 days from invoice date, subject to credit approval.

\* Quotation Validity: This quotation is valid for 60 days unless otherwise indicated.

\* Warranty period for instrumentation is 1 year. The Warranty period for columns and consumables is 90 days.

Visit [www.agilent.com/chem](http://www.agilent.com/chem)

- For Training course information and registration including e-Seminars, select [Education](#).
- For Literature, Application notes, and other information, select [Library](#).
- For Online Technical Support including the Technical Support Assistant and Frequently Asked Questions, select [Technical Support](#).

It is Agilent Technologies intent to ship product at the earliest available date unless specified otherwise.

Brenda Keavey  
West Virginia Department of  
Agriculture  
4720 Brenda Lane Bldg 11  
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## Quotation

Quote No.	Create Date	Delivery Time	Page
2290454	05/15/2017	7 Weeks	8 of 8
Contact	Phone no.	Valid to	
Rick Browning	304-840-4752	07/14/2017	
To place an order: Call 1-800-227-9770 Option 1 For Instruments Fax : 302-633-8953 Email : LSCAinstrumentsales@agilent.com For Consumables Fax : 302-633-8901 Email : CAG_sales-NA@agilent.com For Genomics Fax: 512-321-3128 Email : orders@agilent.com For additional instructions, see last page			

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### Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument

#### 3. GENERAL REQUIREMENTS:

*3.1 Mandatory Contract Item Requirements: Contract Item must meet or exceed the mandatory requirements listed below for the Inductively Coupled Plasma Mass Spectrometry (ICP-MS).*

*3.1.1 Inductively Coupled Plasma Mass Spectrometry (ICP-MS).*

*3.1.1.1 The ICP-MS must have an RF (radio frequency) plasma ion source, a quadrupole based universal cell, a quadrupole mass filter, a quadrupole ion deflector, dual stage discrete dynode detector, a triple cone interface and all under computer control. Additional equipment required is an autosampler (60 sample minimum), computer, monitor, and software for the quantitation of metals.*

Agilent Technologies with its 7800 ICP-MS meets and exceeds all of the specifications on Request for Quotation CRFQ AGR1700000016. The Agilent 7800 is a compact benchtop ICP-MS with an open architecture sample introduction area. The footprint for both the ICP-MS and the autosampler is

smaller than 72" x

36". The 7800

combines the

simplicity of a single

collision cell mode for

polyatomic

interference removal

with the superior

matrix tolerance of its

unique High Matrix

Introduction (HMI)

system. Fourth

generation Octopole Reaction System (ORS<sup>4</sup>) cell technology provides

higher sensitivity and more effective interference removal than ever

before in complex, high matrix environmental samples. Helium mode

on the ORS<sup>4</sup> is so effective that interference correction equations can

also be eliminated. These two factors redefine ease of use in ICP-MS,

removing two of the most common causes of errors in multi-element

analysis of complex samples.



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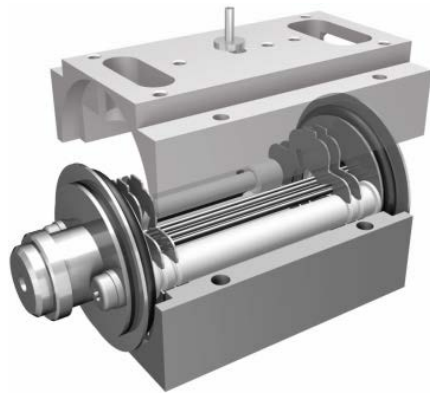
### Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument

3.1.1.2 *ICP-MS must be equipped with universal cell technology able to operate in standard mode, collision mode, and reaction mode.*

Agilent proposal meets and exceeds this specification

The 7800 Series incorporates a new, 4th generation cell, the ORS<sup>4</sup>, which provides superior interference removal in He mode while maintaining optimal ion focusing.

- Enables fast analysis with uniform conditions, for stability and consistent interference removal
- Provides both high ion transmission and superior ion focusing, minimizing ion scattering at the high cell pressures required for effective KED
- He cell mode as standard.
- Only the combination of narrow ion energy distribution (due to ShieldTorch) and the 7800's unique octopole-based cell enables efficient removal of interferences using an inert cell gas (He) and KED. He mode provides several critical advantages compared to reactive cell gases.
- He mode is effective for all polyatomic interferences, not just reactive polyatomics
- The cell gas can be changed with minimal switching time (<5 sec).
- He is inert, so no new interferences are produced, regardless of the matrix
- Unlike a reactive cell gas, He does not react with analytes, so consistent and predictable sensitivity is maintained
- He mode is suitable for all analytes (no-gas mode can be used for un-interfered analytes) and can be used reliably for completely unknown sample matrices - a unique capability of the Agilent ICP-MS.



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- 3.1.1.3 *Must be capable of detecting trace metals in matrices such as foods, soil, vegetation, animal feed, fertilizer and water.*  
Agilent proposal meets and exceeds this specification
- 3.1.1.4 *The quadrupole must be able to scan a minimum of 5000 amu/sec.*  
Agilent proposal meets and exceeds this specification
- 3.1.1.5 *High mass range must be 285 amu or greater.*  
Agilent proposal meets and exceeds the practical aspects of this specification. Uranium at 238amu is the heaviest element mentioned in US EPA methodology Method 200.8; Method SW 846-6020; FDA Forensic Chemistry Center SOP T026 (002); AOAC 968.081; AOAC 985.01; AOAC 2006.03; AOAC 965.09 or AOAC 982.01. The Agilent will analyze any of the elements mentioned in these methods.
- 3.1.1.6 *Must have full compliance or exceed performance of US EPA methodology for Method 200.8; Method SW 846-6020; FDA Forensic Chemistry Center SOP T026 (002); AOAC 968.081; AOAC 985.01; AOAC 2006.03; AOAC 965.09; AOAC 982.01.*  
Agilent proposal meets and exceeds this specification
- 3.1.1.7 *The instrument operates in helium collision cell mode to eliminate interference for isobaric polyatomic species via kinetic energy discrimination.*  
Agilent proposal meets and exceeds this specification. In 2001 Agilent was the first company to use He and Kinetic Energy Discrimination (KED) to eliminate interference for isobaric polyatomic species.
- 3.1.1.8 *Tuning for low oxide and low double charged species is important for minimizing interference.*  
Agilent proposal greatly exceeds this specification  
When tuning an ICP-MS, the minimization of interferences is equally important to high sensitivity and low background performance. A low cerium oxide ratio (CeO/Ce) is the most commonly used indicator of plasma robustness and interference formation. Many factors can influence the



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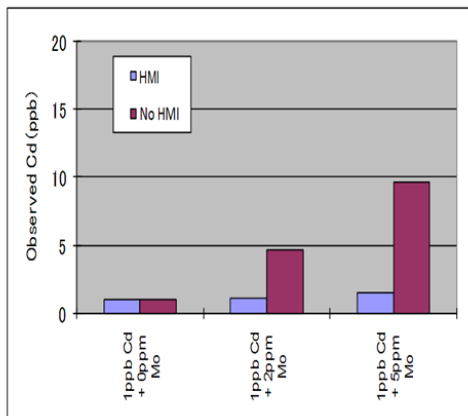
### Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument

formation of interferences; from a high efficiency RF generator and wide torch injector to low sample uptake rates. The typical ICPMS in the market operates at 2% to 3% CeO/Ce ratios. That means that of all the cerium introduced in the system about 3% will form a polyatomic interference and be shifted to a different mass. The importance of reducing this value while tuning is because this newly form polyatomic interference can negatively affect the quantitation of other elements.

**The Agilent's unique and patented technology of the High Matrix Introduction (HMI)** accessory enables the Agilent ICP-MS to operate at unprecedented levels of robustness (down to 0.2% CeO/Ce), which greatly reduces matrix suppression, making the analysis of high matrix samples more reliable and accurate than ever before with ICP-MS.

The reduction of CeO from 3% to 0.3% translates into a 90% reduction of interferences.

### **90% Better Interference Removal with the HMI**



Recovery of a 1 ppb Cd spike in increasing Mo concentration (0, 2, 5 ppm Mo). Comparison of 1% oxides (still better than any other ICP-MS) and 0.2% oxides with the Agilent ICP-MS under HMI conditions.

**The Agilent ICP-MS with HMI offers >90% better interference removal before the sample reaches the ORS**

Assuming 100,000 cps sensitivity for Ce-140

With the HMI 0.2% CeO/Ce  
**200 cps of CeO-156**

Typical ICP-MS = 2%-3% CeO/Ce  
**2,000 - 3,000 cps of CeO-156**

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### Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument

3.1.1.9 *Capable to switch between hydrogen and helium reaction gas*  
Agilent proposal meets and exceeds this specification. The 7800 ORS can switch between hydrogen and helium in less than 10 sec.

3.1.1.10 *All analytical system operations from component optimization to methods development, calibration, analysis and to reports must be able to be performed using a single software program.*  
The Agilent proposal meets or exceeds the requirements.  
The ICP-MS MassHunter software controls all instrument operations including Method Setup, Tuning, Data Acquisition, Data Analysis and Reporting. The user-friendly graphical interface operates under Windows 7 64bit and allows quick and easy set-up and routine operation of the instrument, as well as integrated Maintenance scheduling tools.

3.1.1.11 *System must have a full color plasma view window for useful visuals on the sampler cone, plasma color and injector tip.*  
Agilent proposal meets and exceeds this specification. With the Agilent 7800 the user has plain view from the top and from the side of the plasma, the sampler cone and the injector tip.

3.1.2.1 *Capable of manually entering weights, volumes and a unique run label.*  
Agilent proposal meets and exceeds this specification.

3.1.2.2 *Automatically calculates dilution factor.*  
Agilent proposal meets and exceeds this specification.

3.1.2.3 *Operating system must be fully integrated to control ICP-MS.*  
Agilent proposal meets and exceeds this specification.

3.1.2.4 *Software updates will be provided at no additional cost.*  
Agilent proposal meets and exceeds this specification. All Agilent software updates to the same version are free of charged and available for user download at the Agilent website.  
ICP-MS MassHunter software version 4.3 was specifically designed to support the 7800/7900/8900 ICP-MS as well as providing backward compatibility to the existing 7700 and 8800 instruments.  
MassHunter 4.3 provides complete control of configuration, method setup, data acquisition, data processing and reporting.

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ICP-MS MassHunter 4.3 runs on the Windows 7 Professional (64-bit) operating system.

Advanced functions including Intelligent Sequencing and Chromatographic Data are included in Agilent's proposal.

The new ICP-MS MassHunter 4.3 maintains all the power and functionality of the previous version, but with an emphasis on simpler, more intuitive and more flexible operation.

Some functions and features include:

- Operates on Windows 7®, 64 bit
- Direct control of accessories and peripherals, such as autosamplers and Agilent LC and GC systems
- Comprehensive diagnostic and Early Maintenance Feedback (EMF) tools
- **Support for mobile devices via the Agilent ICP-MS Mobile app for iOS and Android mobile devices.**
- Pre-defined analysis using “Pre-Set Methods” and Pre-Set Plasma Conditions, including multilevel aerosol dilution with HMI or UHMI
- Intelligent Method Wizard (interactive mode)
- Fast and reproducible auto-tuning with tune status and current signal display
- Acquisition Batch for integrated method and sequence setup (Acquisition & Tune conditions, Data Analysis parameters and Sample List)
- Queue view for flexible, interactive sequencing with scheduled task list, current sequence status, and real-time display including configurable “Monitor” function and run time indicator
- Quick Scan for fast screening analysis
- Batch Table overview of Data Analysis results, with real-time update during sequence run
- Advanced rinse programs including Pre-emptive Rinse and Intelligent Rinse
- Time Program and Time Resolved Analysis (optional)
- Interactive data view – shows internal standard recovery and analyte concentration on calibration plot for current sample

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### Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument

- Calibration overview with flexible real-time editing of calibration parameters
- Consistent data analysis view for spectrum and chromatographic data
- Real-time plotting of ISTD and QC results
- user defined action on QC failure
- Advanced tools for spectral analysis and semiquantitative analysis, including overlay and
- automated isotopic template update
- Fast and simple link to Excel 2013 for reporting and data export (e.g. to LIMS)
- Integrated instrument and run control for Agilent 7890GC and common 1200 Infinity LC modules
- Comprehensive chromatographic data analysis, including compound-specific integration, area/peak-sum, overlay/invert
- Snapshot for preview analysis of currently acquiring time resolved data
- Isotope ratio/isotope dilution analysis included.
- Intelligent Method Wizard including fully
- automated method creation
- Support for Fast Transient Signal monitoring
- Support for Ultra HMI (UHMI)
- User configurable “Startup” and Autotune
- Standard QC Action on Failure functions
- Status Viewer shows quick overview of instrument hardware and operational status
- A simple, new, drag and drop custom report template generator that does not require Excel.

*3.1.2.5 Computer includes mouse, minimum 19 inch color monitor, keyboard, DVD-RW drive, at least 2 USB ports, and printing capabilities.*

Agilent proposal meets and exceeds this specification. The Agilent proposal includes the following computer.

Model HP Z240 Small Form Factor Workstation

HP EliteDisplay E222 21.5-inch IPS Monitor

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Windows 7 Professional, 64bit, SP1  
Intel® Xeon® E3-1225v5 (3.3 GHz, 8MB cache, 4 cores)  
4 GB (DDR4)  
500 GB 7200 rpm SATA Optical Drive  
HP DVD-RW SuperMulti Drive  
Intel HD Graphics P530  
Integrated Realtek HD ALC221  
8x USB 3.0 (2 in front, 6 rear)  
2x USB 2.0 (2 in front)  
RS232 Serial Port (2 in total)  
Keyboard, Optical Scroll Mouse  
Dimensions (W x D x H) 3.95 x 15.0 x 13.3  
Weight 12.66 lbs

*3.1.3 Shipping*

*3.1.3.1 Equipment must be delivered within 90 Days after receipt of order.*

Agilent proposal meets and exceeds this specification.

*3.1.3.2 The bidder must explain the details of its proposed packaging sizes for the deliverable(s). All equipment must be packaged and capable of fitting through access doors.*

The specification is noted and accepted. In the bid package there is a copy of the site preparation manual that details all of the requirements for installation.

The Agilent 7800/7900 ICP- MS, its data system and accessories will be delivered to your site in large and small shipping containers.

The largest shipping container will weight 347lbs and with dimensions of 34" X 40" X 40". The containers will be delivered in a large truck. The laboratory must furnish a forklift, or other suitable lifting device, and make arrangements to unload the truck and transport the containers to your site. All doorways, hallways, floors and elevators must be able to accommodate the largest, heaviest container. Do not open any of the shipping

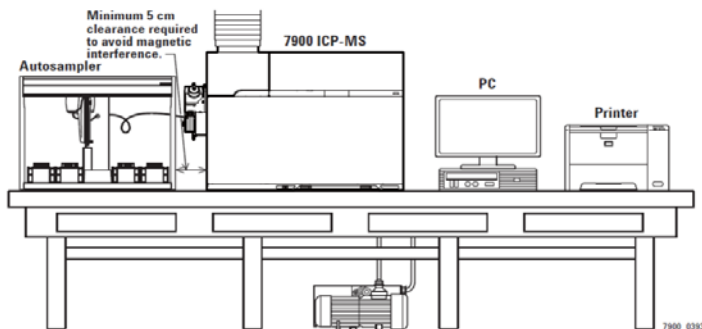
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containers unless a representative of Agilent Technologies is present.

The unboxed instrument and component sizes are detailed below in Table 2.



**Figure 1** Layout Example (7900 ICP-MS)

**Table 2** Product Dimensions

Product	Dimensions, cm (in)			Weight kg (lbs)
	Height	Width	Depth	
7800/7900 ICP-MS	59.5 (23.4) * <sup>1</sup>	73.0 (28.7)	60 (23.6) * <sup>2</sup>	100 (221)
Agilent MS40+ Foreline Pump for 7900	22.8 (9)	29.7 (11.7)	41.8 (16.5)	33 (72.7)
Data System (PC, Monitor, Printer)	Size and weight of the data system depends on the components included. Reserve at least 100 cm (39 in) of bench space for the data system. A typical data system weight is 30 kg (66 lb).			
Agilent Heat Exchanger (G1879B)	57.2 (22.5)	38.0 (15.0)	51.4 (20.25)	42 (92)
Agilent SPS 4 Autosampler	51.0 (20.1)	60.0 (23.6)	36.3 (14.3)	15 (33.1)

#### 3.1.4 Installation

3.1.4.1 *Vendor must be on-site for delivery and perform the installation (labor and supplies included) of the ICP-MS.*

The specification is noted and accepted. Agilent proposal includes installation and familiarization.

3.1.4.2 *The vendor must provide a written validation of the instrument's performance after installation.*

The specification is noted and accepted. Agilent will provide a written validation of the instrument's performance after installation.

3.1.4.3 *Installation shall be performed by the Vendor who shall agree to have an adequate number of trained staff and materials within 30 days of completion of the installation checklist.*

The specification is noted and accepted.

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3.1.5 *Validation*

3.1.5.1 *The vendor must provide a written validation of the instrument's performance after installation.*

The specification is noted and accepted. Agilent will provide a written validation of the instrument's performance after installation.

3.1.6 *Warranty*

3.1.6.1 *Vendor will provide a full one-year parts and labor warranty on all items, including preventative maintenances that are recommended by the Vendor's preventative maintenance service plans.*

The specification is noted and accepted. The Agilent proposal includes a full one-year parts and labor warranty on all items, including a preventative maintenance visit.

3.1.7 *Training*

3.1.7.1 *Vendor will provide on-site training (labor and non-consumables supplies included) for all instruments and software.*

The specification is noted and accepted. The Agilent proposal includes 3 days of on-site training.

3.1.8 *Preventive Maintenance*

3.1.8.1 *Preventative maintenance services shall be performed by the Vendor who shall agree to have an adequate number of trained staff and replacement parts available in order to comply with the requirements in 3.1.8.2 and 3.1.8.3.*

The specification is noted and accepted.

3.1.8.2 *Vendor must respond to service calls within 24 hours.*

The specification is noted and accepted.



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3.1.8.3 *Vendor must be capable of performing all requests for repairs and/or service within three business days of request.*

The specification is noted and accepted.

3.1.8.4 *After any preventative maintenance or repairs have been completed on a particular instrument, the Vendor shall guarantee the accuracy and precision of the instrument at the location where the instrument will be used.*

The specification is noted and accepted.

3.1.8.5 *Reports of service will be signed by State of WV authorized laboratory personnel to ensure work has been completed.*

The specification is noted and accepted.



Agilent 7800 Quadrupole ICP-MS

# **FAST-TRACK YOUR METALS ANALYSIS WITH SOLUTION-READY ICP-MS**

The Measure of Confidence



**Agilent Technologies**

## TAKE A NEW LOOK AT ROUTINE METALS ANALYSIS

The new, Solution-Ready Agilent 7800 ICP-MS combines proven, robust hardware, auto-optimization tools, and Pre-set Methods to simplify routine analysis, making your laboratory more productive, and your results more reliable.

What's more, with high matrix tolerance, wide dynamic range, and effective control of polyatomic interferences, the 7800 ICP-MS takes the uncertainty out of analyzing complex or variable sample matrices.

The 7800 ICP-MS is extraordinarily easy to set up and use, so you can quickly produce reliable results in the widest range of sample types.

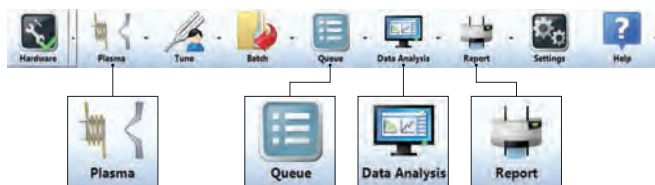
### Fast track your ICP-MS method development

- New ICP-MS MassHunter software provides fast system setup, robust auto-optimization tools and extensive system status monitoring, to ensure consistent high performance.
- Many common methods can simply be loaded and run, with settings – from plasma conditions to analyte integration times and internal standards – predefined in a Pre-set Method. Where a specific new method is needed, the Method Wizard simplifies the setup process.
- The software includes performance, tune, QC, and sample report templates with operator tutorials for refresher or new-user training.
- Standard operating procedures (SOPs) for several common applications, guide new users in system setup and routine operation, setting you on the fast track to accurate analysis.



#### Solution-Ready ICP-MS

The 7800 ICP-MS includes SOPs for common applications, including drinking water, environmental waste analysis, and Elemental Impurities in pharmaceutical products.



#### Simplify your method setup

ICP-MS MassHunter software uses an intuitive layout with graphical toolbar Gadgets, making it easy to learn and use. The innovative Method Wizard builds a fully functional method based on your sample type and application.

## LET THE AGILENT 7800 ICP-MS STREAMLINE YOUR ANALYTICAL WORKFLOW

### Maximize throughput and productivity

The optional Integrated Sample Introduction System (ISIS 3), shown, and new SPS 4 autosampler lower your cost per analysis, without compromising data quality.

### Reduce sample preparation and minimize suppression

Agilent's unique High Matrix Introduction (HMI) technology, standard on the 7800 ICP-MS, lets you analyze samples containing up to 3% total dissolved solids (TDS) without dilution, reducing sample preparation and saving time.

HMI also reduces signal suppression, so high matrix samples can be measured accurately without requiring matrix matched calibration standards.

### Ensure accurate data with effective interference removal

Helium (He) collision mode simplifies method development and routine operation by removing all polyatomic ion interferences under a single consistent set of conditions.

He mode avoids the need for matrix-specific or analyte-specific reaction cell conditions.

### Analyze major and trace analytes in a single run

The wide dynamic range orthogonal detector system (ODS) enables direct analysis of major elements (100s or 1000s of ppm) and trace level analytes (single- or sub-ppt) in a single run, simplifying methodology.

The high upper concentration limit reduces sample reruns caused by overrange results.



## For more information

Learn more

**[www.agilent.com/chem/7800icpms](http://www.agilent.com/chem/7800icpms)**

U.S. and Canada

**1-800-227-9770**

**[agilent\\_inquiries@agilent.com](mailto:agilent_inquiries@agilent.com)**

Europe

**[info\\_agilent@agilent.com](mailto:info_agilent@agilent.com)**

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**[inquiry\\_lsca@agilent.com](mailto:inquiry_lsca@agilent.com)**

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## Services let you focus on what you do best

Whether you need support for a single instrument or multiple labs, Agilent can help you solve problems quickly, increase uptime, and maximize the productivity of your team with:

- Familiarization disk including over 20 tutorial videos.
- On-site maintenance, repair and compliance.
- Service agreements for all your systems and peripherals.
- Application training and consulting from our dedicated, worldwide network of specialists.

## Agilent Service Guarantee

If your Agilent instrument requires service while covered by an Agilent service agreement, we guarantee repair or we will replace your instrument for free. No other manufacturer or service provider offers this level of commitment to keeping your lab running at maximum productivity.

## Leading the way in atomic spectroscopy innovation

**[www.agilent.com/chem/atomic](http://www.agilent.com/chem/atomic)**



**Agilent AA**



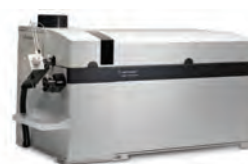
**Agilent MP-AES**



**Agilent ICP-OES**



**Agilent ICP-MS**



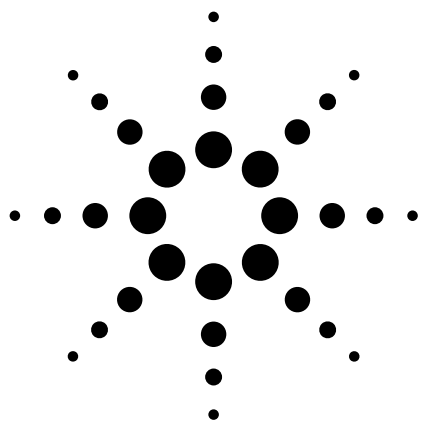
**Agilent ICP-QQQ**

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**Agilent Technologies**



## Agilent 7800 ICP-MS

### Specifications



### Fast track metals analysis with Solution-Ready ICP-MS

The Solution-Ready Agilent 7800 Quadrupole ICP-MS combines proven, robust hardware, auto-optimization tools, and pre-set methods to simplify routine analysis, making your laboratory more productive, and your results more reliable.

What's more, with high matrix tolerance, wide dynamic range, and effective control of polyatomic interferences, the 7800 ICP-MS takes the uncertainty out of analyzing complex or variable sample matrices.

The 7800 ICP-MS is extraordinarily easy to set up and use, so you can quickly produce reliable results in the widest range of sample types.



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## Instrument hardware

### Sample Introduction

**Nebulizer:** Concentric nebulizer with low sample flow rate as standard (~0.2 mL/min)

**Spray Chamber:** Quartz, low-volume, Scott-type double-pass spray chamber, provides improved removal of larger aerosol droplets, compared to cyclonic or impact-bead designs. Peltier-cooling eliminates the need for a separate external cooling water supply.

- Controlled temperature range: -5 °C to +20 °C (with instrument cooling water at 15–30 °C)

**Peristaltic Pump:** Low-pulsation, high-precision 10-roller peristaltic pump, with three separate channels, for precise delivery of sample and internal standard (ISTD), plus spray chamber drain.

**High Matrix Introduction (HMI):** Agilent's unique, patented HMI aerosol dilution technology, standard on the 7800, extends the total dissolved solids (TDS) range to percent level, while eliminating the added costs, time and potential errors of conventional liquid dilution.

### Plasma

**RF generator:** High power-transfer efficiency and maintenance-free solid state digital drive 27 MHz RF generator with variable-frequency impedance matching. Provides significantly improved tolerance of changes in sample matrix; even highly volatile organic solvents can be introduced without affecting plasma stability.

- RF power range: 500 W to 1600 W

**Torch:** Easy-mount, one-piece quartz torch with 2.5 mm internal diameter injector. The exceptionally wide torch injector produces a highly robust plasma that efficiently decomposes the sample matrix, reducing many interferences and minimizing routine interface cleaning.

**Torch position:** Stepper-motor controlled in three axes (horizontal, vertical and sampling depth) in 0.1 mm steps. The torch is automatically realigned with the interface following maintenance.

- Horizontal and vertical position range:  $\pm 2$  mm
- Sampling depth: 3 to 28 mm

**ShieldTorch system:** Agilent's unique ShieldTorch System (STS) precisely controls plasma potential and ion energy - essential to achieve high performance He mode.

**Robust pre-set plasma conditions:** Plasma conditions on the 7800 ICP-MS are robust and easily reproduced using the pre-set plasma function within MassHunter—no manual tuning is required. Consistent hardware engineering ensures that operating conditions can be precisely set and consistently applied from day to day and with different operators.

Signal suppression for high ionization potential elements such as Be, Zn, As and Cd in 10 vol% HNO<sub>3</sub> matrix is typically less than 10% (Plasma mode: General Purpose).

### Interface

**Sampling cone:** 1 mm diameter orifice, Ni-tipped or Pt-tipped (option) with Cu base. Easy access to the interface region for routine maintenance; no tools are required for removal/refitting of sampling cone. The large cone-retaining ring insures reliable thermal contact and reproducible fitting, even with different operators, giving dependable long-term performance.

**Skimmer cone:** 0.4 mm diameter orifice, Ni or Pt-tipped (option). Precisely controlled skimmer tip temperature ensures minimal matrix condensation, providing good tolerance to high matrix samples. Small skimmer orifice reduces matrix contamination of the high vacuum region, reducing maintenance.



## Ion Lens

The ion lens provides high ion transmission and low backgrounds to deliver superior detection limits. The ion lens design also ensures that fixed voltages can be used to achieve optimum ion transmission across the mass range.

**Extraction lens:** Positioned behind the skimmer cone, the extraction lens focuses the ions as they enter the intermediate vacuum stage, minimizing space charge effects and reducing mass bias.

**Off-axis Omega lens:** This double deflection lens protects the ORS<sup>4</sup> cell and high vacuum region from contamination, by rejecting neutral species from the ion beam. This contributes to the minimal mass bias and low background noise.

## Octopole Reaction System

The 7800 ICP-MS incorporates a new, 4th generation cell, the ORS<sup>4</sup>, which provides fast cell gas switching and the most effective interference removal using kinetic energy discrimination (KED) in He mode.

**Octopole:** The octopole ion guide provides superior ion focusing, minimizing ion scattering and ensuring that high sensitivity is maintained at the high cell pressures required for effective KED.

**He cell mode as standard:** Only the combination of narrow ion energy distribution (due to ShieldTorch) and the 7800's unique octopole-based cell enables efficient removal of interferences using an inert cell gas (He) and KED. The use of He cell gas also eliminates safety issues related to reactive gases such as H<sub>2</sub>, H<sub>2</sub> mixes or NH<sub>3</sub>.

**Cell gas control:** The 7800 ICP-MS has a single He cell gas controller as standard. A second or third cell gas line can be added to permit the use of reactive cell gases such as H<sub>2</sub>, xenon or ammonia. If multiple cell gases are used in a method, the cell gas is automatically changed with minimal switching time (~5 sec).

## Mass Analyzer

**Quadrupole mass spectrometer:** The 7800 uses a true hyperbolic quadrupole, unique in ICP-MS, operating at high (3 MHz) frequency. A hyperbolic profile quadrupole provides superior ion transmission, resolution and abundance sensitivity at standard settings, so eliminating the need for multiple resolution settings to separate adjacent peaks.

- Mass range: 2 - 260 amu
- Abundance Sensitivity (at Cs):
  - Low Mass side:  $\leq 5 \times 10^{-7}$
  - High Mass side:  $\leq 1 \times 10^{-7}$

**Orthogonal detector system (ODS):** The ODS delivers higher sensitivity, lower background, and a wider linear dynamic range – up to 10 orders of magnitude from 0.1 cps to 4 Gcps. The detector life time is approximately twice as long as the 7700 detector.

Fast signal acquisition in spectrum mode is supported by a proprietary analog amplifier, which has a minimum integration time of 100  $\mu$ s in both pulse and analog mode.

## Vacuum System

Three-stage differential vacuum system using a single, split-flow turbo molecular pump and single external rotary pump for fast pump-down and simple maintenance. Unique Auto-recover mode returns the 7800 to standby (pumping) state when electrical power is resumed after a power failure, saving valuable time. No need to manually start the vacuum system or wait for system pump-down following an overnight power failure.

## Software

Agilent ICP-MS MassHunter features a dashboard layout with gadgets that guide you through every step of your analysis – hardware configuration, instrument optimization, sample acquisition and data analysis. This user-friendly interface makes learning and using the software easier and more intuitive, without compromising power and flexibility for advanced or

research applications.

MassHunter includes:

- An innovative matrix-specific Method Setup Wizard, enabling all users, experienced and new, to consistently obtain high-quality data with confidence.
- Batch-at-a Glance data table with real-time update, including all sample data, ISTD/QC signal trend and calibration curves.
- Built-in outlier and LabQC checks

## Optional Software

The power of ICP-MS MassHunter can be extended through a choice of software options:

**User Access Control:** Provides multi-level user logon control for enhanced security and audit, with three levels of access authority, record of user name, Operating System lock and more.

With Agilent's OpenLAB Data Store, ECM, or Spectroscopy Database Administrator (SDA), ICP-MS MassHunter with User Access Control satisfies compliance requirements including US FDA 21 CFR Part 11.

**Chromatographic software:** Fully integrated Agilent LC and GC method setup, instrument control, sequencing, and chromatographic data analysis. Permits automatic sequence recalibrations, retention time and ion ratio updates, Compound Independent Calibration, Snapshot, automated report generation and more.

**Intelligent Sequencing** provides comprehensive, configurable QA/QC functionality for automatic QA/QC checks and actions during unattended operation. Includes templates for QC reports for standard methods such as US EPA 6020 and 200.8.

For full details of Agilent's ICP-MS MassHunter software, refer to the separate ICP-MS MassHunter

specifications.

## Guaranteed performance

For each specification, the actual instrument factory test certificate of guaranteed performance is included with every 7800 ICP-MS instrument.

Specification (units)	Element/Ratio	7800 ICP-MS
Sensitivity (Mcps/ppm)	Li (7)	≥50
	Y (89)	≥160
	Tl (205)	≥80
Background (cps)	No gas (9 u)	≤1.0
Oxide ratio (%)	CeO/Ce	≤1.5
	CeO/Ce (HMI-25)	≤0.5
Doubly-charged ratio (%)	Ce <sup>2+</sup> /Ce	≤3.0
No gas mode DL (ppt)	Be (9)	≤0.5
	In (115)	≤0.1
	Bi (209)	≤0.1
	He mode DL (ppt)*	≤20
H <sub>2</sub> mode DL (ppt)**	Se (78)	≤40
	Se (78)	≤1
Short-term stability (%RSD)	Li, Y, Tl	≤2
Long-term stability (%RSD)	Li, Y, Tl	≤3
Isotope ratio precision (%RSD)	Ag(107)/Ag(109)	≤0.1

\* He mode detection limits for As and Se are performed in a matrix of 1% HNO<sub>3</sub>, 2% HCl and 100 ppm Ca, demonstrating the effective removal of both ArCl and CaCl interferences. All other tests are performed in a matrix of 1% HNO<sub>3</sub>.

\*\* Applied when optional H<sub>2</sub> cell gas line is fitted.

## Site requirements and safety

Dimensions		
Mainframe	Width	730 mm (main cabinet, excluding peripump)
	Depth	600 mm (main cabinet, excluding power cord)
	Height	595 mm (main cabinet, excluding exhaust chimney)
	Weight	100 kg
Largest shipping container	Width	1,020 mm
	Depth	1,120 mm
	Height	1,000 mm
	Weight	148 kg

Environmental		
Operating temperature	Range	15–30 °C
	Rate of change	<2 °C/hr (max. change 5 °C)
Operating humidity	Range	20% to 80% (non condensing)
Utilities		
Electricity supply	Voltage	Single Phase, 200–240 V, 50/60 Hz
	Current	30 A
Cooling water	Inlet temperature	15–40 °C
	Minimum flow rate	5 L/min
	Inlet pressure	230–400 kPa (33–58 psi)
Argon gas supply	Minimum purity	99.99%
	Maximum flow rate	20 L/min
	Supply pressure	500–700 kPa (71–100 psi)
Cell gas supply	Minimum purity	99.999%
	Maximum flow rate	12 mL/min for He and 10 mL/min for H <sub>2</sub>
	Supply pressure	90–130 kPa (13–18.8 psi) for He and 20–60 kPa (2.9–8.7 psi) for H <sub>2</sub>
Exhaust duct	Vent type	Single vent, 150 mm diameter
	Flow rate	5–7 m <sup>3</sup> /min
Regulatory compliance		
Safety	IEC 61010-1:2001 / EN 61010-1:2001, CAN/CSA C22.2 No.61010-1-04, UL No.61010-1	
	IEC 61010-2-061:2005, CAN/CSA C22.2 No.61010-2-061-04	
	IEC 61010-2-081:2001+A1 (2003), CAN/CSA C22.2 No.61010-2-081-04	
EMC	IEC 61326-1:2012 / EN 61326-1:2013, ICES-001:2006, AS/NZS CISPR 11: 2011	
ISO	Manufactured at an ISO 9001 and ISO 14001 certified facility	

## Standard mainframe configuration

Component	
Nebulizer (concentric)	MicroMist (borosilicate glass)
Spray Chamber (Scott double-pass)	Quartz
Torch (with ShieldTorch System)	Quartz, 2.5 mm ID Injector
High Matrix Introduction (HMI)	Included
Interface Cones	Ni
Plasma Mass Flow Controllers (Ar)	4
Option Gas Line for such as 20%O <sub>2</sub> /Ar for organics, or He carrier gas for laser ablation	Option
He (collision) cell gas line	Included
H <sub>2</sub> (reaction) cell gas line	Option
3rd cell gas line (low- or high-flow rate options)	Option

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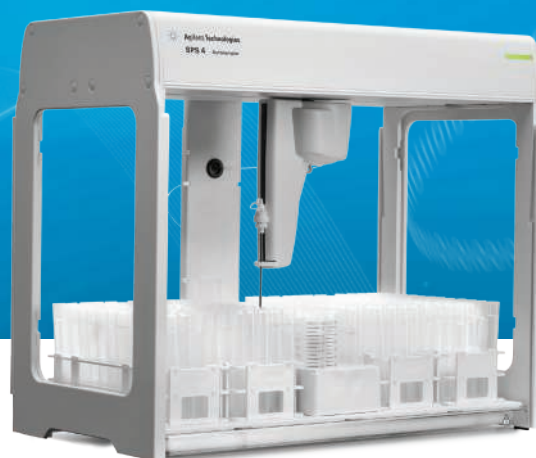
Publication number: 5991-5927EN



**Agilent Technologies**

# AGILENT SPS 4 AUTOSAMPLER

## INNOVATIVE. ROBUST. PRODUCTIVE.



### PROMISING 10 YEARS OF VALUE



From the date you purchase the Agilent SPS 4 autosampler, Agilent guarantees at least 10 years' use or residual-value credit towards a replacement model upgrade. Our Value Promise maximizes your return-on-investment by ensuring that your purchase is safe.

### Introduction

The SPS 4 is a next-generation, high-performance autosampler for atomic spectroscopy applications. Designed to meet the needs of high-throughput laboratories requiring a fast, high-capacity (up to 360 samples or 768 microtiter wells), reliable autosampler, it is also small, quiet, easy-to-use and affordable. The SPS 4 is suitable for ultra-trace analysis by ICP-MS and rugged and robust enough for FAAS, MP-AES, and ICP-OES users.

Built around an innovative gantry design that supports the mechanical components between two rigid pillars, the SPS 4 provides improved accuracy and precision, high speed, ease of access, and corrosion resistance — all within a footprint that is nearly 40% smaller than other autosamplers in its class.

With the integrated environmental enclosure (optional), the SPS 4 offers maximum sample integrity while protecting your laboratory environment from hazardous sample vapors, all without compromising a millimeter of valuable bench space. In addition, access to the power switch, peristaltic pump, and all electrical and communications ports are outside the environmental enclosure for easy access and protection from corrosion.



## Uniquely Agilent in design and compatibility

- Heavy-duty, powder-coated aluminum frame for light weight, maximum rigidity and corrosion resistance.
- User programmable high-speed probe arm assembly and optimized movement for fastest sample-to-sample speed.
- USB plug-and-play connectivity allows fast and easy setup.
- Integrated spill tray contains accidental spills, protecting the laboratory bench and simplifying cleanup.
- Standards rack and rinse port are centrally located for the fastest access and maximum throughput.
- All electronic and mechanical components are located in top gantry, away from liquid spills, for long life and easy maintenance.
- Compatible with Agilent's full range of atomic spectroscopy instruments.
- Modern industrial design combines well thought out robustness and performance characteristics with a sleek, eye-catching profile that coordinates with Agilent's newest MP-AES, ICP-OES and ICP-MS designs.

## Flexible rack configuration enables wide range of sample capacities

- Compatible with a wide range of commercially available (Bel-Art) metal-free sample racks, including 90-, 60-, 40-, 24-, and 21-position racks. A 96-well microtiter plate rack is also available for ICP-MS.

Rack capacity (# tubes)	Tube OD (mm)	Maximum tube height (mm)
90	13	150
60	17	150
40	20	150
24	25	150
21	30	150

- Rack configuration is user selectable, and rack sizes can be mixed and matched as needed.
- Central standards rack is configurable to support either a 34 position (twelve 29 mm OD tubes plus twenty two 17 mm OD tubes) or 5 position (five 61 mm OD bottles) rack (depending on instrument configuration).
- Four sample rack capacity supports up to 360 samples, permitting long unattended runs in high-throughput labs.
- Eight 96-well microtiter plate capacity, with optional well plate kit, supports up to 768 samples (for ICP-MS only).

## Leading the way in atomic spectroscopy innovation

The SPS 4 is compatible with Agilent's comprehensive atomic spectroscopy portfolio.



Agilent SPS 4



Agilent AA



Agilent MP-AES



Agilent ICP-OES



Agilent ICP-MS



Agilent ICP-QQQ

### **Integrated environmental enclosure option protects your samples and your laboratory environment**

- Maintain maximum sample integrity by protecting samples from the lab environment.
- Protect operators and laboratory instrumentation from corrosive sample vapors.
- Fully integrated environmental enclosure takes up no extra valuable bench space.
- When the environmental enclosure is fitted, sample visibility remains unrestricted, as well as sample access from the front when the door is in the raised position.
- Vertically sliding front access door can be fixed open for easy access to samples.
- Electrical and plumbing connections remain outside the environmental enclosure for easy access with the cover in place.
- Environmental Enclosure Kit includes a 50 mm (2 in) extraction air duct fitting that can be fitted to either side of the autosampler as needed.

### **Dual-wash reservoir option eliminates potential carryover**

- Optional dual-port wash reservoir for ultra-trace applications or applications requiring two different rinse chemistries.

### **Three-channel peristaltic pump for ultimate flow-through rinse flexibility**

- Simultaneously pump two different rinse solutions (in conjunction with the optional dual wash reservoir)
- Third channel still allows for a pumped drain when a gravity drain is not an option.

### **Multiple probe size options for a diverse range of applications**

- A range of carbon fiber–reinforced fluoropolymer probes suit all applications from microvolume sampling to high-speed discrete sampling.
- Integrated nebulizer/probe assembly option for ultra-clean applications.
- Programmable probe speed in 3 axes for the ultimate performance with all sample types.
- Intelligent probe acceleration and deceleration permits high speed while minimizing spattering.
- Programmable probe depth for sedimentary or separated layer samples.



SPS 4 autosampler shown with optional integrated environmental enclosure. Front cover shown in fixed open position for easy access to samples.



## Specifications

Dimensions: Width 600 mm (23.6 in), Depth 320 mm (12.6 in),  
Depth 363 mm including peristaltic pump (14.3 in), Height 510 mm  
(20.1 in)

Weight: 15 kg (33.1 lbs)

Probe arm speed: User programmable in X, Z, and Theta (rotational)  
dimensions. Optimized sample-to-sample probe movement time for  
corner-to-corner travel in less than 3 seconds.

Axis	Minimum speed	Maximum speed
X (mm/sec)	14.5	1016
Z (mm/sec)	8.6	518
Theta (degrees/sec)	9	540

Rinse port flow rate: Programmable, up to 50 mL/min depending  
on pump tube diameter.

Communication: USB 2.0 (full speed) virtual com port with  
plug-and-play capability.

AUX interface: RS485 for future upgradability to external device  
control.

Power requirements: 100–240 VAC, 47–63 Hz, 1.5 A

Built-in diagnostics: The SPS 4 includes a row of four LEDs on the  
front panel that indicate the operational or error status of the  
instrument.

### Supported instruments:

AA <sup>a</sup>	MP-AES <sup>b</sup>	ICP-OES <sup>c</sup>	ICP-MS <sup>d</sup>
55B (computer controlled)	4100	5100	7700
240FS	4200		7800
280FS			7900
			8800
a. Requires SpectrAA software version 5.3 or above.	b. Requires MP Expert software version 1.5.1 or above.	c. Requires ICP Expert software version 7.1 or above.	d. Requires ICP-MS MassHunter software version 4.2 or above.



### Genuine Agilent supplies for flexible sample handling and maximum productivity

Agilent supplies for the SPS 4 autosampler are designed to give  
flexibility in sample handling and maintain the high performance  
of your system. With a wide range of sample racks and vessels  
supporting small or large sample volumes, probe options  
and interface supplies, we can help keep your lab running at  
maximum productivity.

Learn more: [www.agilent.com/chem/AtomicSupplies](http://www.agilent.com/chem/AtomicSupplies)

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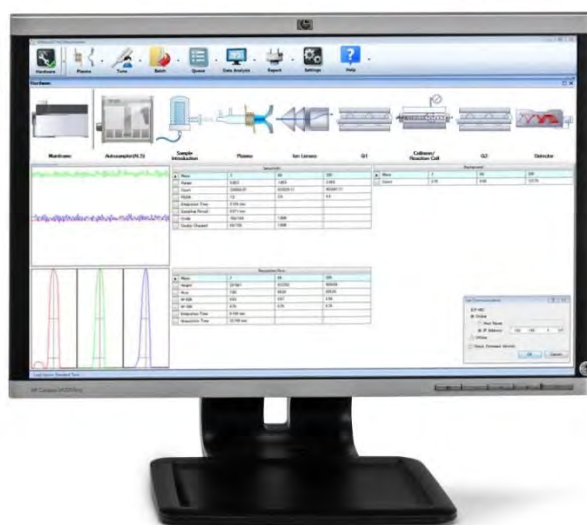
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## Specifications

ICP-MS MassHunter 4.3 Software for the Agilent 7700, 7800 & 7900 ICP-MS, & 8800 & 8900 ICP-QQQ Systems



ICP-MS MassHunter 4.3 is the latest version of Agilent's simple, intuitive and powerful ICP-MS Workstation software. MassHunter 4.3 supports the 8900 triple quadrupole ICP-MS (ICP-QQQ) and is compatible with the 7700, 7800, and 7900 quadrupole ICP-MS and 8800 ICP-QQQ instruments. In addition to usability enhancements, MassHunter 4.3 has significant new functionality, including enhancements to the Method Wizard and Single Nanoparticle Application Module, and support for a wider range of third party peripherals. MassHunter 4.3 controls configuration, method setup, data acquisition, data processing and reporting for all currently supported ICP-MS systems.

ICP-MS MassHunter 4.3 runs on the Windows 7 or Windows 10 Pro or Enterprise Edition operating systems (64 bit only).

ICP-MS MassHunter 4.3 consists of a base configuration and one of five MassHunter software options (#001, #002, #003, #004 or #005), depending on which mainframe is supported (7700, 8800, 7900, 7800 or 8900, respectively).



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In addition to the core software which is specific to the ICP-MS mainframe (as determined by the option number selected), advanced functions including the Single Nanoparticle Application Module, Intelligent Sequencing, Chromatographic Data Analysis, and User Access Control Pack are available as options. Support for advanced functions available on the 7900 such as "Advanced Acquisition - option #102" and "UHMI - option #101" is included when those hardware options are purchased.

The new ICP-MS MassHunter 4.3 maintains and enhances the power and functionality of the previous version, while retaining the simple, intuitive user interface and workflows. Both Top Level and Data Analysis utilize intuitive, easy to read "Gadgets," arranged in the order in which they are commonly accessed, and with related functions combined into a single access point. Important, but less frequently used functions are organized together under the "Settings" gadget (see below).



### ICP-MS MassHunter 4.3 compatibility

- Operates on Windows 7 Pro or Enterprise Edition or Windows 10 Pro or Enterprise Edition. It requires 64 bit versions.
- Supports all current ICP-MS and ICP-QQQ mainframes and peripherals including the 7700, 7800 and 7900 ICP-MS and 8800 and 8900 ICP-QQQ. Supported autosamplers include the Agilent SPS 4, ASX-520 and I-AS autosamplers and the Cetac ASX-110 and EXR/XLR 8 autosamplers
- Many additional third party samplers and accessories are supported via plug-ins developed by the third party supplier. Contact Agilent for details
- Supports full integration of Agilent 7890 GC and 7693 autosampler
- Supports full integration of most Agilent 1100 and 1200 Series HPLC modules and peripherals

## New features of version 4.3

- Optional Single Nanoparticle Application Module (G5714A) automates setup of method and batch for data acquisition and analysis of nanoparticles, both in single particle mode and field flow fractionation mode. In single particle mode, the algorithm to determine the background has been enhanced, detection of small particles has been made more accurate, and the capability to determine and report two elements or isotopes has been improved. The Single Nanoparticle Application Module is compatible with all supported ICP-MS mainframes. On the 7900 and 8900, 100 microsecond dwell time acquisition with no settling time is available for single isotope determinations
- The unique Method Wizard has been enhanced, providing better optimization and faster analysis times in "Speed" mode, and now including availability of a method automation report
- Reporting functionality has been extended, with a more intuitive report designer in Agilent's Common Reporting Engine (CRE), support for Excel templates, and support for Excel 2016
- Upgraded functionality for LC-ICP-MS users including support for the 1260 and 1290 Infinity Multi-sampler (G7167A/B)
- New for ICP-MS MassHunter 4.3, Intelligent Sequencing is now compatible with the 8800 and 8900 ICP-QQQ systems, as well as the 7700, 7800 and 7900 ICP-MS instruments
- "Demo Mode" permits simulation of a fully functional online instrument for training and troubleshooting purposes

## ICP-MS MassHunter functions

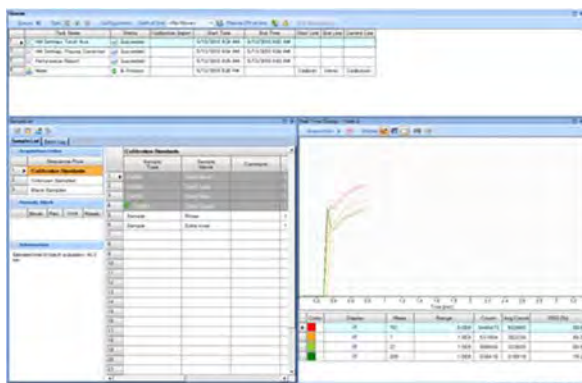
### Instrument Control, Startup and Optimization

- MassHunter 4.3 provides full control of the 7700, 7800, 7900, 8800 and 8900 ICP-MS instruments, including automated Startup and optimization procedures, and automated, unattended system shutdown at the end of a sequence
- Startup provides a user-configured schedule of system optimization and performance checks to be run under consistent conditions following plasma ignition

- Startup is particularly useful in busy commercial laboratories, as it ensures that instrument performance is checked and recorded under uniform conditions from day to day, and between different operators. A "history view" allows simple monitoring of variations in instrument performance and tuning parameters over time
- Fast and reproducible auto-tuning with tune status and current signal display
- Easy setup and configuration of mainframe options and connected peripherals
- Comprehensive diagnostic and Early Maintenance Feedback (EMF) tools

## Batch and Queue

- The Batch contains all the information and settings (sample introduction/peripump program, tune modes and settings, acquisition masses and integration times, internal standards, sample list, calibration parameters and QC settings) required to setup and run a sample batch
- Batches can be created from a blank template, a Pre-set Method or an existing batch, or by using the Method Wizard. Customized batches can be saved as Templates making it easy to reuse settings for future batches
- The Queue is the schedule of tasks assigned to the instrument for automated, sequential execution
- Queue manages all hardware and acquisition tasks including Startup and optimization, batch analysis and automated shutdown
- The real-time display indicates current sequence status, and a configurable "Monitor" function (shown below) displays the signals for user-selected masses between sample acquisitions

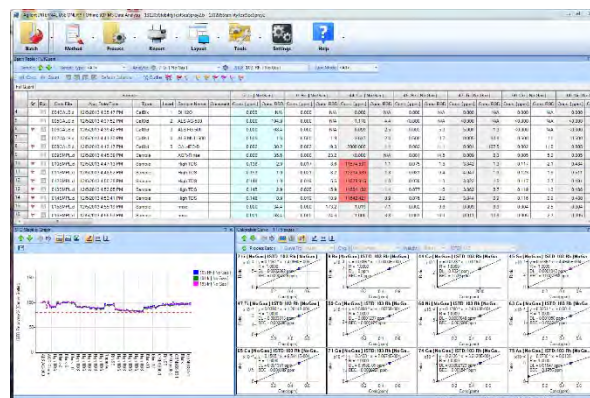


## Data Acquisition

- Perform pre-defined analysis using settings defined in the Batch/tune conditions, including multi-level aerosol dilution with HMI or UHMI
- Advanced rinse programs including Pre-emptive Rinse and Intelligent Rinse
- Quick Scan for fast screening analysis, integrated in the main acquisition and data analysis pane
- Spectrum, Isotope Ratio, Time Program, Time Resolved Analysis (TRA) and Fast TRA Analysis
- Time resolved acquisition includes support for continuous runs of more than 24 hours for laser imaging
- Integrated instrument and run control for Agilent 7890GC and common 1200 Series LC modules

## Data Analysis and Reporting

- ICP-MS MassHunter uses a flexible, interactive Data Batch table that is updated in real-time during sequence analysis. The Data Batch table displays all results (counts, concentration, SD, etc.) for a batch of samples (shown below)

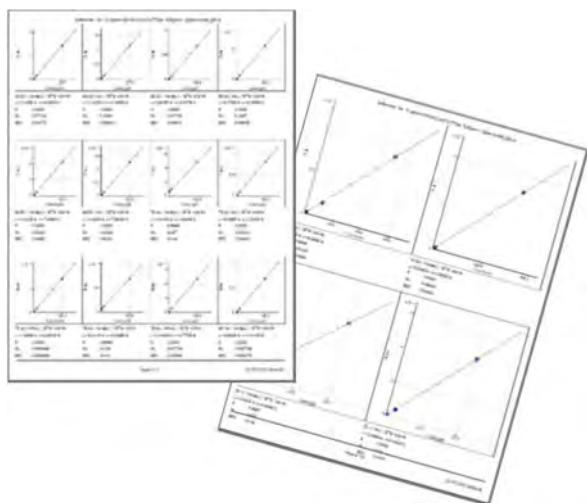


- The Batch view shows analyte results, internal standard recoveries, spectra or chromatograms, QC charts and calibration information for an entire batch or selected samples in a single view
- Outlier flags and LabQC functions are provided, and the screen layout can be switched between built-in and customized views
- Calibration modes include
  - External calibration\*
  - Method of standard additions
  - Semi-quantitative calibration
  - Isotope ratio (optional for 7800 and 7900)
  - Isotope dilution (optional for 7800 and 7900)



\*Calibration curve fit options include linear, linear through zero, linear through the blank, weighted least squares, log and second order

- A range of configurable calibration reports is provided (illustrated below)



- Data analysis view is consistent for spectrum data, and optional chromatographic and nanoparticle data analysis modules
- Recalibrations performed during the sequence are applied automatically to the subsequent samples, including converting standard addition to external calibration, isotope ratio mass bias correction, and semi-quantitative calibration update
- Up to 5 user-definable LabQC sample types, plus spike and reference samples; includes plotting and user defined action on QC failure
- Advanced tools for spectral and semi-quantitative analysis, including potential interference flags, spectral overlay and automated isotopic template update
- Isotope ratio/isotope dilution analysis (optional with advanced acquisition software on 7800 and 7900)
- The data (entire table or selected samples) may be reported directly to print/file, or quickly and easily exported to Excel 2013/2016 for advanced data analysis, further processing or transfer to custom 3<sup>rd</sup> party software
- A built-in, user-configurable LIMS export tool permits simple export of selected data to LIMS
- Compatible with OpenLAB ECM or SDA for regulatory compliance in pharmaceutical labs

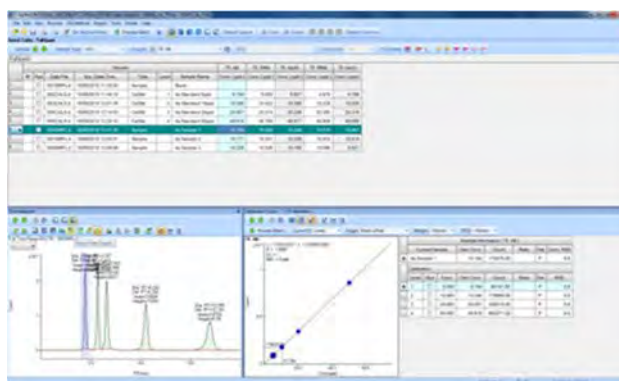
## Optional Software Modules

### Chromatographic Analysis software

ICP-MS MassHunter's optional chromatographic software module (G7205C) provides fully-functioned, integrated control for Agilent LC- and GC-ICP-MS systems, and comprehensive chromatographic data analysis with advanced integration tools.

A new parameter-less integrator (Agile2 integrator) automatically adjusts to peak widths, shapes, and baseline noise to correctly integrate practically any chromatographic peak with virtually no user input.

The chromatographic data analysis pane is analogous to the spectrum data analysis pane and includes the current chromatogram display, quantitative results, outlier functions and calibration information.



Advanced chromatographic functions include:

- Chromatographic and spectrum based internal standard correction
- Peak auto integration using global or user-selectable integration parameters per peak
- Interactive manual integration
- Snapshot data analysis of current sample during acquisition run-time
- Compound-independent calibration (CIC)
- Signal to Noise calculation
- Automatic retention time updates

### Intelligent Sequencing Real-time QC software

The main ICP-MS MassHunter software suite includes many QC functions, including Tune Checks, Intelligent Rinse, Outlier flags, LabQC samples and options for simple run-time actions on QC failure.

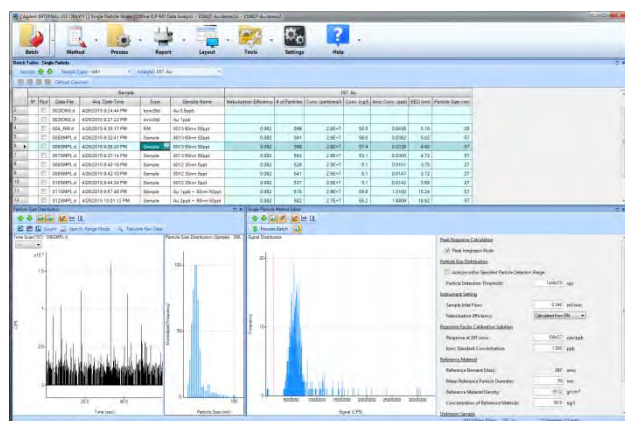
For advanced QC requirements (such as full compliance with USEPA methodology), the optional Intelligent Sequencing software module (G7206C) provides full QC configuration and reporting tools.

Intelligent Sequencing tools include the capability for multi-level QC checks and actions on failure, and support for a large number of user configurable sample types with customizable report templates. Now also available for the 8800 and 8900 ICP-QQQ systems.

## Single Nanoparticle Application Module

The optional Single Nanoparticle Application Module (G5714A) fully automates the task of setting up an analysis batch for nanoparticle determination, either in single particle mode or in field flow fractionation (FFF) mode.

The Single Nanoparticle Application Module is built into the easy-to-use Method Wizard, so creating a nanoparticle method is fast and intuitive. Acquisition parameters optimized for either single particle mode or FFF mode are automatically set up with a few mouse clicks. Sample flow, nebulization efficiency, ionic response factor and particle detection threshold are automatically calculated.



Results are displayed both in tabular format in the Batch-at-a Glance view, and graphically, including particle number, particle concentration, size distribution, median size, ionic concentration, and Background Equivalent Diameter. Powerful interactive data review and optimization tools simplify validation of results, and an entire batch of samples takes just seconds to process.

## User Access Control software for 21 CFR Part 11 Compliance

The optional User Access Control module (G7207C) provides flexible, configurable, multi-level user access control, to limit access to ICP-MS MassHunter and individual functions within the software. Actions can be set to be permitted only for certain user levels and, for each action, the requirement for the user to enter a valid username/password combination and reason can be set.

In combination with Agilent's OpenLAB ECM or SDA software, the User Access Control option for ICP-MS MassHunter can provide a solution that satisfies all the regulatory requirements of the US FDA's 21 CFR Part 11 and equivalent regulations in other countries and regions. The comprehensive range of Agilent compliance software options cover user needs from single workstation (SDA) through to multi-instrument, multi-site, global enterprise level operations (ECM).

# ICP-MS MassHunter 4.3 Workstation Compatibility

## Auto samplers

All supported ICP-MS and ICP-QQQ mainframes are compatible with the following optional autosamplers:

- SPS 4
- I-AS
- ASX-520
- ASX-110
- EXR/XLR-8

The ISIS 2 autosampler is compatible with the 7700 and 8800 instruments only. The ISIS 3 autosampler is compatible with the 7900, 7800 and 8900 instruments only.

## Operating system components

MassHunter 4.3 is compatible with:

- Windows 7 (Pro and Enterprise Editions, 64 bit, SP1), or
- Windows 10 (Pro and Enterprise Editions, 64 bit)
- Internet Explorer 9.0 or later
- Excel 2013 or 2016 (32 bit only)

## Optional software modules

The following optional software modules for ICP-MS MassHunter 4.3 are compatible with all supported ICP-MS and ICP-QQQ mainframes:

- Chromatographic Analysis
- Intelligent Sequencing
- Single Nanoparticle Application
- User Access Control

	7700 Series <sup>1</sup> & 8800	7900	7800	8900
<b>Software Functions</b>				
<b>Method Wizard (interactive mode)</b>	Yes	Yes	Yes	Yes
<b>Method Wizard (automatic mode)</b>	No	x-lens only	No	No
<b>Time Resolved Analysis (TRA) mode</b>	Yes	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes
<b>Fast TRA mode (0.1 msec. minimum dwell time)</b>	No (3 msec.)	Yes <sup>2</sup>	No (3 msec.)	Yes
<b>Isotope Ratio/Isotope Dilution</b>	Yes	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes
<b>High-Resolution/Half-Mass Mode (for correction of 2+ interferences)</b>	Yes	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes
<b>Quick Scan</b>	Yes	Yes	Yes	Yes
<b>High Matrix Introduction function (HMI)</b>	Yes	No	Yes	No
<b>Ultra High Matrix Introduction (UHMI)</b>	No	Yes <sup>3</sup> (x-lens only)	No	Yes <sup>4</sup> (x-lens only)

<sup>1</sup> 7700e requires an upgrade to enable the functionality of C.01.03 which is equivalent to upgrading first to the "full" version of B.01.xx, then to C.01.03.

<sup>2</sup> with option #102

<sup>3</sup> with option #101

<sup>4</sup> not with option #200



	<b>7700 Series<sup>1</sup> &amp; 8800</b>	<b>7900</b>	<b>7800</b>	<b>8900</b>
<b>Fast Cell Gas Switching</b>	No	Yes	Yes	Yes
<b>Autotune</b>	Yes	Yes	Yes	Yes
<b>Flexible Manual Tuning</b>	Yes	Yes	Yes	Yes
<b>Spray Chamber Temperature Control (selectable -5 °C to 20 °C)</b>	Yes	Yes	Yes	Yes
<b>H<sub>2</sub> Cell Gas control</b>	Optional for 7700 Included for 8800	Optional	Optional	Included
<b>Link to OpenLAB ECM or SDA for full compliance with 21 CFR Part 11</b>	Yes	Yes	Yes	Yes
	(requires User Access Control software option G7207C)			
<b>eFamiliarization (Tutorial video) (Audio: English, Chinese, Japanese Subtitle: French, Italian, German, Spanish, Portuguese, Korean)</b>	No	Yes	Yes	Yes
<b>Remote Advisor (Level A)</b>	Yes	Yes	Yes	Yes

Supported Agilent LC and GC Modules – Full integration and control of LC and GC modules from within ICP-MS MassHunter

<b>Agilent LC Module</b>	<b>Part Number</b>
<b>1200 Isocratic Pump</b>	G1310A
<b>1260 Isocratic Pump</b>	G1310B
<b>1200 Binary Pump</b>	G1312A
<b>1260 Binary Pump SL</b>	G1312B
<b>Solvent Selection Valve</b>	G1312B, #031
<b>1260 Binary Pump VL</b>	G1312C
<b>1290 Binary Pump</b>	G4220A
<b>1290 Binary Pump VL</b>	G4220B
<b>1260 Infinity SFC Binary Pump</b>	G4302A
<b>1100 Quaternary Pump</b>	G1311A
<b>1260 Quaternary Pump</b>	G1311B
<b>1260 Quaternary Pump VL</b>	G1311C
<b>1290 Infinity Quaternary Pump</b>	G4204A
<b>1260 Infinity Bio-inert, Ti Head, Fe-Free Quaternary Pump VL</b>	G5611A
<b>1100 Standard ALS</b>	G1313A
<b>1200 Standard ALS</b>	G1329A


<b>1260 Standard ALS SL</b>	G1329B
<b>1260 SFC Standard ALS</b>	G4303A
<b>1260 Infinity II Vialsampler</b>	G7129A
<b>Integrated Column Compartment</b>	G7130A
<b>1100 Well-Plate ALS</b>	G1367A
<b>1200 High Performance ALS</b>	G1367B
<b>1200 High Performance ALS SL</b>	G1367C
<b>1200 High Performance ALS SL Plus</b>	G1367D
<b>1260 Infinity High performance ALS SL</b>	G1367E
<b>1290 Infinity ALS</b>	G4226A
<b>Bio-Inert LC metal-free ALS</b>	G5667A
<b>1290 Infinity Thermostat</b>	G1330B
<b>1260 Infinity Multisampler</b>	G7167A
<b>1290 Infinity II Multisampler</b>	G7167B
<b>1260 Low Flow High Performance Sampler</b>	G1377A
<b>1260 Cap-LC Pump</b>	G1376A
<b>1260 Nano-LC Pump</b>	G2226A
<b>1260 Low Flow Sampler</b>	G1389A
<b>1290 Infinity Thermostatted Column Compartment</b>	G1316A
<b>1290 Infinity Thermostatted Column Compartment SL</b>	G1316B
<b>1290 Infinity Thermostatted Column Compartment SL Plus</b>	G1316C
<b>1260 Infinity Micro Degasser (no software control)</b>	G1379B

<b>Agilent GC Module<sup>5</sup></b>	<b>Part Number</b>
<b>7890A GC system</b>	G3440A
<b>7890B GC system</b>	G3440B
<b>7693B Auto injector module</b>	G4513A
<b>7693 Auto sampler tray module</b>	G4514A

<sup>5</sup> Note that GC Firmware must be version A.01.11.1 or later for direct support from ICP-MS MassHunter

## Ordering information

### MassHunter 4.3 Workstation PC Bundle for the Agilent 7700, 7800 and 7900 ICP-MS, and 8800 and 8900 ICP-QQQ systems<sup>6</sup>

Part Number	Description	
G7215C	Agilent MassHunter-Ready Workstation for 7700, 7800 and 7900 ICP-MS, and 8800 and 8900 ICP-QQQ systems	
Agilent’s ICP-MS MassHunter-ready workstation includes a PC (one of the models listed below), monitor, printer, Windows 7 Pro (64 bit version), Excel 2013 (32 bit) and manuals. Does not include ICP-MS MassHunter software (select the appropriate software module from those listed below)		
Hardware-specific ICP-MS MassHunter software modules:		
G7215C, #001	ICP-MS MassHunter G7201C for the 7700x/s ICP-MS	
G7215C, #002	ICP-MS MassHunter G7201C for the 8800 ICP-QQQ	
G7215C, #003	ICP-MS MassHunter G7201C for the 7900 ICP-MS	
G7215C #004	ICP-MS MassHunter G7201C for the 7800 ICP-MS	
G7215C #005	ICP-MS MassHunter G7201C for the 8900 ICP-QQQ	
PC specifications	MassHunter is tested and supported on the models listed below, or on models shipped later.	
	HP Z230 (Small Form Factor)	
Processor Type	Intel® Xeon® E3-1225v3 8MB cache, 4C (Quad-core)	
Processor Speed	3.2 GHz	
RAM	HP 4GB (1x4GB) DDR3-1600 non-ECC RAM	
Hard Disk	500 GB SATA, 6Gb/s, 7200rpm	
Optical Drives	HP 16x SuperMulti DVD+/-RW SATA Drive	
Graphics	Integrated Intel HD Graphics P4600	
Audio	Integrated High Definition Realtek ALC221 Audio	
Accessories	Keyboard and Optical Mouse	
Ports	LAN* port – Integrated Intel I217LM Gigabit Network Interface Additional RS232 Serial Port (2 in total)	

<sup>6</sup> Subject to change without notice

	<b>HP Z220 (Small Form Factor)</b>	
Processor Type	Intel® Xeon® E3-1225v2 8MB cache, 4C (Quad-core)	
Processor Speed	3.2 GHz	
RAM	4 GB (2 x 2GB) DDR3-1600 non-ECC RAM	
Hard Disk	250 GB SATA, 6Gb/s, 7200rpm	
Optical Drives	HP 16x SuperMulti DVD+/-RW SATA Drive	
Graphics	Integrated Intel HD Graphics P4000	
Audio	Integrated High Definition Realtek ALC221 Audio	
Accessories	Keyboard and Optical Mouse	
Ports	LAN port – Integrated Intel 82579LM Gigabit Network Interface Additional RS232 Serial Port (2 in total)	
<b>Operating System</b>	<b>Windows 7 Professional, 64 bit, SP1 (English/Japanese/Chinese)</b>	
Monitor	HP Z221 21.5" widescreen LCD	
Laser Printer	(English/Chinese) HP LaserJet P3015dn (600 sheets tray capacity / 35ppm) (Japanese) Canon LBP-6330	

#### NOTE

The ICP-MS is connected to the instrument control PC using the standard LAN port of the PC. If a second LAN connection is required, for example to connect the PC to a building LAN or to control an Agilent LC or GC system, a LAN switch (switching hub) such as the HP ProCurve Network Switch (G2402A) is recommended. It is possible to use a second LAN card, but communication problems have been reported with this configuration, so the preferred and supported configuration is with a network switch.

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## Current PC Specifications for ICP-MS MassHunter Workstation

Note: subject to change without notice

### PC

<b>Model</b>	<b>HP Z240 Small Form Factor Workstation</b>
<b>Operating System</b>	<b>Windows 7 Professional, 64bit, SP1 (English/Japanese/Chinese)</b>
<b>Processor</b>	Intel® Xeon® E3-1225v5 (3.3 GHz, 8MB cache, 4 cores)
<b>Memory</b>	4 GB (DDR4)
<b>Hard Disk</b>	500 GB 7200 rpm SATA
<b>Optical Drive</b>	HP DVD-RW SuperMulti Drive
<b>Graphics</b>	Intel HD Graphics P530
<b>Audio</b>	Integrated Realtek HD ALC221
<b>Ports</b>	8x USB 3.0 (2 in front, 6 rear) 2x USB 2.0 (2 in front) RS232 Serial Port (2 in total)
<b>Input Devices</b>	Keyboard, Optical Scroll Mouse
<b>Dimensions (W x D x H)</b>	100 x 381 x 338 mm (3.95 x 15.0 x 13.3)
<b>Weight</b>	6.7 kg (12.66 lbs)

Note: The ICP-MS is connected to the instrument control PC using the standard LAN port of the PC. If a second LAN connection is required, for example to connect the PC to a building LAN or to control an Agilent LC or GC system, a LAN switch (switching hub) such as the HP ProCurve Network Switch (G2402A) is recommended. When using a second LAN card, communication problems are commonly reported with this configuration, so the preferred and supported configuration is with a network switch.



## Monitor

Model	HP EliteDisplay E222 21.5-inch IPS Monitor
Display size	21.5", Wide screen (16:9)
Dimensions (W x D x H) (with stand)	514 x 189 x 334 mm (20.22 x 7.44 x 13.13 in)
Weight (with stand)	5.27 kg (11.62 lb)



## Printer

English / Chinese

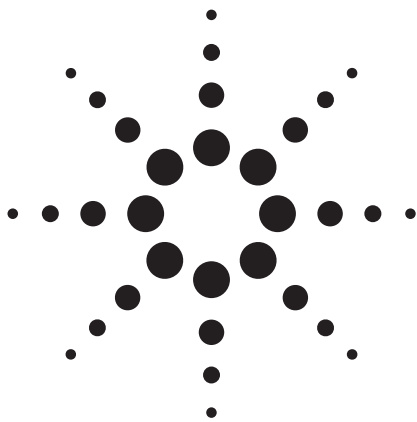
Model	HP LaserJet Enterprise M506dn
Dimensions (W x D x H)	418 x 376 x 298 mm (16.46 x 14.80 x 11.73 in)
Weight	11.8 kg (25.9 lbs)

Japanese

Model	Canon LBP251
Dimensions (W x D x H)	400 × 377 × 298 mm
Weight	11.5kg







## Agilent Technologies, Inc. – Support Services: Repair Service/Extended Warranty, Agilent CrossLab Service Plans

Exhibit 22X

Agilent  
**CrossLab**

Agilent Technologies' Repair Service/Extended Warranty and Agilent CrossLab Service Plans are governed by this Exhibit and the Agilent Service Terms (E16S).

### **Repair Service/Extended Warranty, and Agilent CrossLab Service Plans**

Repair Service/Extended Warranty, and Agilent CrossLab Service Plans include defined combinations of Agilent services, which Customers may not substitute. The following service bundles are available from Agilent, on supported products:

**Repair Service/Extended Warranty (R-28D).** Repair Service/Extended Warranty provides warranty-level service coverage on supported instruments. Services include: Telephone Support to Isolate and Resolve Hardware Problems, and On-site Hardware Troubleshooting and Repair with Standard Response time according to the defined warranty repair strategy for the specific hardware system or module. All labor, travel costs, and repair service parts are included.

**Agilent CrossLab Bronze (R-28C).** Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems and On-site Hardware Troubleshooting and Repair with Standard Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair are included. Upon availability, the Agilent Remote Advisor service is also included.

**Agilent CrossLab Bronze - Government/Academia (R-29C).** The Agilent CrossLab Bronze – Government/ Academia service plan is only available to Government and Academia customers. Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems and On-site Hardware Troubleshooting and Repair with No Guaranteed Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair are included. Upon availability, the Agilent Remote Advisor-Assist service is also included. Agilent reserves the right to substitute Service Center Repair for On-site service as deemed necessary.

**Agilent CrossLab Silver (R-28R).** Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, Service Center Repair\* and On-site Hardware Troubleshooting and Repair with Standard Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair, are included. Additionally included are one Agilent CrossLab Preventive Maintenance, and upon availability, Agilent Remote Advisor is also included.

**Agilent CrossLab Silver Plus (R-38R).** This service is available for select Agilent LCs and includes the Deuterium Lamp Replacement benefit. Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, Service Center Repair\* and On-site Hardware Troubleshooting and Repair with Standard Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair, are included. Additionally included are one Preventive Maintenance visit including the replacement of the Deuterium lamp, and upon availability: Agilent Remote Advisor is also included.



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**Agilent CrossLab Silver with OQ (R-28S, R-28U).** Services include: services defined in the Agilent CrossLab Silver (R-28R) section above and furthermore one Agilent CrossLab Operational Qualification (OQ/ PV) event which is guaranteed to pass.

**Agilent CrossLab Silver with OQ and RQ (R-28T, R-28V).** Services include: services defined in the Agilent CrossLab Silver (R-28R) above and furthermore one Agilent CrossLab Operational Qualification (OQ/PV) event which is guaranteed to pass, and Agilent CrossLab Repair Qualification (RQ) which allows for unlimited number of re-qualifications after a repair within the contract period.

**Agilent CrossLab Silver with Software (R-28W).** Services include: services defined in the Agilent CrossLab Silver (R-28R) above and furthermore workstation Software Media Updates.

**Agilent CrossLab Gold (R-18E).** Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, Service Center Repair\* and On-site Hardware Troubleshooting and Repair with Next Business Day Response time, where available. All labor, travel costs, service parts, including Consumable Parts Required for Repair are included. Additionally included are one Preventive Maintenance, and upon availability: Agilent Remote Advisor-Assist, Agilent Remote Advisor-Report, and Agilent Remote Advisor-Alert. Also included are an assigned account manager with quarterly review meetings, and an onsite cache of commonly needed parts.

**Agilent CrossLab Gold with OQ (R-18F, R-18H).** Service includes: services defined in the Agilent

CrossLab Gold (R-18E) above and furthermore one Agilent CrossLab Operational Qualification (OQ/PV) event which is guaranteed to pass.

**Agilent CrossLab Gold with OQ and RQ (R-18G, R-18J).** Services include: services defined in the Agilent CrossLab Gold (R-18E) section above and furthermore only one Agilent CrossLab Operational Qualification (OQ/PV) event which is guaranteed to pass, and Agilent CrossLab Repair Qualification (RQ) which allows for unlimited number of re-qualifications after a repair within the contract period.

**Module Repair (R-28X).** Service coverage for individual module only. Service includes: Telephone Support to Isolate and Resolve Hardware Problems, and On-site Hardware Troubleshooting and Repair with Standard Response time according to the defined warranty repair strategy for the specific hardware system or module. All labor, travel costs, and repair service parts are included.

Certain hardware components may require return to Agilent services at an Agilent Service Center Repair.

**Repair Service/Extended Warranty Mass Spec Only (R-29D).** Service includes: services defined in the Repair Service/Extended Warranty section above for the Mass Spec component of supported GCMS or LCMS systems. No service is performed on the front-end components.

**Agilent CrossLab Bronze Mass Spec Only (R-29B).** Services include: services defined in the Agilent CrossLab Bronze (R-28C) section above, for the Mass Spec component of supported GCMS or LCMS systems. No service is performed on the front-end components.

**Agilent CrossLab Repair and Maintenance – Government/Academia (R-29R).** The Agilent CrossLab Repair and Maintenance – Government/Academia Service plan is only available to Government (Country/State/Local) and Academia (College/University) customers. Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, On-site Hardware Troubleshooting and Repair with No Guaranteed Response time. All labor and travel costs are included. Parts and Consumables required for repair are not included and must be purchased from Agilent. Only one Agilent CrossLab Preventive Maintenance is included. Upon availability: the Agilent Remote Advisor service is included.

**Agilent CrossLab Silver with Functional Verification (R-26X).** Services include: services defined in the Agilent CrossLab Silver (R-28R) section above and furthermore one Agilent CrossLab Functional Verification testing event within the contract period. Only one Agilent CrossLab Preventive Maintenance is included.

**Agilent CrossLab Gold with Functional Verification (R-16W).** Services include: services defined in the Agilent CrossLab Gold (R-18E) section above and furthermore one Agilent CrossLab Functional Verification testing event within the contract period. Only one Agilent CrossLab Preventive Maintenance is included.

Service center repair option available only for products that specify this repair method or in cases where this option is mutually beneficial to customer and Agilent.

## Service Definitions

### ***Service Definitions for All Repair Service/Extended Warranty and Agilent CrossLab Service Plans***

**Telephone Support to Isolate and Resolve Hardware and Software Problems.** Includes telephone access to Agilent for the specific purpose of isolating and resolving hardware problems. If software phone support is specified, also includes telephone access for the specific purpose of isolating and resolving software problems. Software phone support covers only the single instance of the Agilent workstation software controlling the covered instrument system. Excludes client- server database software and Informatics software. May include software support from vendors other than Agilent for Multi-Vendor Services arrangements.

**On-site Hardware Troubleshooting and Repair.** Includes diagnosis and correction of product malfunctions and failures at the Customer site. Repair is provided uninterrupted, unless Agilent determines that additional parts or resources are required. In such case, Agilent will interrupt repair services and will resume as soon as the parts or resources are available. The repair may consist of temporary procedures that Customer must follow while a permanent solution is developed.

**Modules for Service Center Repair.** Agilent systems may contain hardware modules that require Agilent service center repair. These modules are not subject to on-site support.

**Deuterium Lamp Replacement.** Agilent CrossLab Silver Plus plans include one (1) deuterium lamp during the 12 months period of the agreement. On site replacement of this lamp by an Agilent engineer will occur during

the included Preventive Maintenance (PM) visit. If the lamp does not require replacement at the time of the PM visit, the customer may contact Agilent anytime during the agreement coverage and request a lamp be shipped to them at no charge. If the lamp is not requested during the agreement period, no credit will be given or passed along to future agreements.

Agilent Labor and Travel to install the lamp outside of the PM visit is not included in the agreement.

**Consumable Parts Required for Repair.** With the exception of the lamp benefit contained in Agilent CrossLab Silver Plus, consumables and supplies required during the routine maintenance and normal operation of your instruments are not included in any Agilent CrossLab Service Plan. However certain supplies and consumable parts may be required as part of repair or the diagnosing of instrument or product problems. [www.agilent.com/chem/svccconsumables](http://www.agilent.com/chem/svccconsumables)

Unless otherwise stated, the quantity of such items included in contractual coverage is limited to the amount necessary to return the instrument to normal operation.

**Service Center Repair.** Includes diagnosis and correction of product malfunctions and failures at local Agilent Service Centers. Agilent may install engineering improvement modifications, when applicable, and perform services such as cleaning, adjusting, lubricating, inspecting or testing. Repaired products are re-tested and certified to verify proper operation. All required labor, parts and materials are included. Replaced parts become the property of Agilent.

**Agilent CrossLab Preventive Maintenance.** Includes replacement of specific parts, cleaning, adjusting, lubricating, inspecting or testing system procedures. Agilent may also perform routine operational maintenance procedures. Labor and parts required to perform Agilent's preventive maintenance procedures and travel to Customer's site once during the coverage period are included. Preventive Maintenance is performed according to Agilent-recommended procedures upon a mutually agreed schedule, or coincident with purchased instrument calibration or operational qualification service. Instrument specific maintenance procedure checklists are available from Agilent upon request.

Agilent CrossLab Silver Plus includes a deuterium lamp benefit that is provided at the time of the Preventive Maintenance Visit.

**Agilent CrossLab Operational Qualification.** Determines operational performance using a chemical test sample kit of known concentration on chromatography instruments via Agilent CrossLab Operational Qualification (OQ) procedure and methodology. The service is compatible with all Agilent instruments, and selected non-Agilent products. Service is provided annually.

**Agilent CrossLab Repair Qualification.** Uses Agilent CrossLab procedures and testing methodology to test that a system is performing to Agilent's operational specification after repair. The service is provided after repair of system components that may impact system operational performance.

**Agilent Remote Advisor-Assist.**

Enables Customer to open a service request by clicking the Push for Help icon on connected systems. The Push for Help request is acknowledged within one (1) hour and Customer receives a call back within four (4) hours from Agilent to isolate and resolve hardware issues. Additionally, enables Customer to open a secure Real-time Collaboration session with Agilent for live remote diagnostics and assistance. This feature not available for all systems. Remote Advisor features require installation; installation charges may apply.

**Agilent Remote Advisor-Report.**

Provides instrument configuration, availability and utilization reporting information for connected systems in hardcopy form or via access to secure web-based reporting portal. This feature not available for all systems. Remote Advisor features require installation; installation charges may apply.

**Agilent Remote Advisor-Alert.** Allows Customer to set text or email alerts to notify Customer when instrument maintenance thresholds are reached or when the instrument requires user interaction. This feature not available for all systems. Remote Advisor features require installation; installation charges may apply.

**Overtime Service.** Overtime is defined as support delivered outside or extending beyond normal business hours of 8:00 AM to 16:00 PM local time Monday through Friday except local holidays (may vary by country).

**Response Time.** Response time is measured in elapsed coverage days from the day the service request is received to the day Agilent arrives at Customer's site. Standard Response time varies depending on the distance from an Agilent office. The travel zone distance varies by country.

**Software Media Updates.** At Agilent's discretion, software updates and documentation may be delivered automatically to Customer's site or provided via website portals, where available. Agilent grants a license to use the updates in accordance with the software license terms associated with the underlying Software. Note: Only Agilent CrossLab Silver with Software service includes media updates.

**Service Prerequisites*****Applicable for Agilent CrossLab Service Plans:***

**Recommended Modifications, Reliability, and Performance Enhancements.** Agilent may make recommended modifications at Agilent's expense to improve instrument serviceability or reliability, to comply with legal requirements, or to enhance performance of Customer's instruments, covered by Agilent service agreements. Any such changes are made during the period of coverage according to a mutually agreed upon schedule or coincident with instrument repair.

***Applicable for Qualification Services:***

**Preventive Maintenance.** A preventive maintenance procedure when recommended by manufacturer may be performed prior to qualification services at customers expense unless otherwise covered by service agreement.

***Applicable for Software Support Services:***

**General.** Agilent provides telephone support only for software that Customer has properly licensed and that is used on instrumentation or hardware that meets Agilent specifications for that software. Support is available for current software version and for last previous version for a minimum of one (1) year from the date of last availability. Telephone support is not available for any software which has reached end-of-support. If support coverage lapses, additional fees may apply.

**Designated Callers.** Customer must identify one primary and one alternate caller, both of whom have completed appropriate Agilent training courses or have equivalent experience operating the applicable Agilent Life Sciences and Chemical Analysis instruments or Informatics Systems.

**Telephone Access.** Customer must provide a telephone near the system or at another mutually agreed location, which allows Customer to perform software operations required during problem resolution.

**Diagnostic and Maintenance Software.** Customer must allow Agilent to reside Agilent system and network diagnostic and maintenance programs on Customer's system or site for the exclusive purpose of performing diagnostic and maintenance procedures. Prior to submitting a software problem report to Agilent, Customer may be asked to assist Agilent in running such programs, which are the sole property of Agilent and Agilent may remove them when the support contract ends.

## Customer Responsibilities

### ***Customer Responsibilities for All Repair Service/Extended Warranty and Agilent CrossLab Service Plans***

#### **Operating and Maintenance**

**Procedures.** Customer must follow the operating and maintenance procedures specified in the applicable instrument documentation. These procedures include routine operational maintenance and other routine maintenance associated with the operation of an instrument. Customer shall be responsible for all service and parts required due to failure to perform these procedures.

**Access.** Customer must provide Agilent access to the instruments, adequate working space and use of all information and facilities necessary to service the instrument at Customer's site.

**Appropriate Communication Ability.** Customer must have adequate access to telephones near instruments and must be fluent in a language supported by local Agilent Call Center. Web, e-mail and fax access are required for patches and information transfer.

**Material Shipping and Receiving Capabilities.** Customer must have facilities available to ship and receive parts, including the ability to deal with static-sensitive parts and protective packaging.

**Locked Cabinet or Room (Agilent CrossLab Gold service).** Customer must provide a locked cabinet or room for the onsite parts cache. The parts remain Agilent owned until consumed by the customer. Customer will not remove parts from the cache without prior consent from Agilent.

## ***Applicable for Service Center Services:***

**Compliance with Agilent Process.** Customer must follow the standard Agilent process for calling, reporting and qualifying a hardware problem. The pertinent Instrument information must be provided.

**EHS Form.** Customer must enclose the completed Environmental Health & Safety (EHS) form, or if not available, provide a written statement that no EHS hazard exists as a result of the use of the instrument in Customer's laboratory.

**Proper Packaging.** Any returned instruments must be carefully packed in a proper shipping carton.

## ***Applicable for Mass Spectrometer Maintenance and Ion Source Cleaning Services***

**Venting.** Customer must vent the Mass Spec system prior to Preventive Maintenance and/or Ion Source Cleaning Services. Customer is also responsible for supplying and safely disposing of the necessary solvents used during the ion source cleaning.

## ***Applicable for Qualification Services:***

**Rescheduled Services.** Customer is responsible for costs incurred by Agilent as a result of postponing or rescheduling any qualification service.

**Business Decisions.** Business decisions or actions taken by Customer as a result of any qualification service procedure are responsibility of the Customer.

**Proprietary Information.** Any Agilent-copyrighted materials may not be copied unless Agilent agrees to such copying in writing.

## Service Limitations

### ***The following limitations apply to all Repair Service, and Agilent CrossLab Service Plans***

**Product Eligibility.** Unless otherwise stated, eligibility for services is limited to select Agilent and Agilent-supported non-Agilent instruments only and is subject to local availability. These Agilent products must have been purchased as 'new' products by the Customer from Agilent or a reseller authorized by Agilent to sell these products.

Coverage of Agilent products procured from sources other than those above or purchased 'used' items may be covered at Agilent's discretion. A physical and operational inspection by trained Agilent personnel will be required at Customer's expense prior to extending coverage. If contractual service is desired, the customer is responsible for Time and Materials charges prior to repair such used equipment should defects be discovered during the inspection.

Any service not covered by the contractual service ordered, including but not limited to software support, is subject to Agilent's standard service rates. The serviced system must include at least the minimum configuration or other configuration specified in the appropriate instrument documentation.

**Service Availability.** Coverage hours will be Agilent's normal business hours (08:00 am to 17:00 pm local time), Monday through Friday, excluding local holidays.



**Maximum Use Limitation.** Agilent may assess additional service charges for certain electromechanical devices based on the measured usage of the unit if a maximum usage rate is specified in the instrument data sheet or operational manual. Customer must allow Agilent to install or remove usage meters, and must provide meter readings on a periodic basis. Support for instruments used beyond the recommended level is limited to time and materials service and invoiced separately.

**Obsolete Instruments.** Agilent standard services do not cover instruments or products that are beyond their specified support period.

**End-of-Guaranteed-Support.** Service coverage under this Exhibit (including multi-year agreements) for any main analytical component such as a mainframe or subordinate components such as a detector will automatically convert to Agilent CrossLab Extended Service coverage when the component reaches its End-of-Guaranteed-Support. In cases where Agilent CrossLab Extended Service is not available, the service coverage for that main analytical component or subordinate component will cease. Price uplifts may apply. Agilent CrossLab Extended Service options are described in a separate service exhibit 22L. Agilent CrossLab Extended Service applies only to Agilent instruments.

**Contamination and Corrosion.**

Services for parts and instruments that become contaminated when operated in hazardous environments or difficult to service, including requiring more than typical parts replacement will be subject to additional charges. Customer is responsible for proper disposal of all contaminated material that cannot be returned to Agilent in a safe manner.

**Consumables, Supplies and Parts.**

Supplies or consumables for the routine maintenance or normal operation of Agilent Instruments or Products are not included.

**Application Software Support.**

Agilent provides remote support for two (2) designated callers to isolate and resolve software issues or problems with Agilent Application Software including but not limited to ChemStation, ChemStore, and EZChrom Elite Workstation series. Support for the operating system, any other software on the system, in-depth training, consulting or any custom engagements, including software customization, are not included. Response time is four (4) hours during Agilent business hours. Issues not solved remotely are handled through Agilent on-site service and subject to additional charges.

**Agilent Informatics Software**

**Support.** Support for Agilent Informatics software, including but not limited to Agilent OpenLab CDS client/server installations, Agilent OpenLAB ECM, and Agilent OpenLab ELN, is not included. Support coverage for Agilent Informatics software may be purchased separately.

**Modules for Service Center Repair.**

Agilent systems may contain hardware modules that require Agilent service center repair. These modules are not subject to on-site support.

**Software Updates.** Software updates or upgrades are not specifically provided under any Agilent CrossLab service plan. Contractual software update services may be purchased at additional charge for eligible Agilent instruments.

**Support for Agilent-Provided PC**

**Hardware and Peripherals.** Agilent Repair Service/Extended Warranty and Agilent CrossLab Service Plans cover repair of select PCs, laptops, and monitors purchased from Agilent or Agilent-authorized sources within three years of instrument purchase. Agilent reserves the right to repair or replace a non-functioning PC or monitor under coverage with a model of equal or greater specification at Agilent's discretion. Printers and other peripherals are specifically excluded from all service coverage described above.

## Cancellation or Deletion

Upon sixty (60) days prior written notice, Customer may delete Product from or cancel in its entirety a Service Agreement to which this Exhibit applies, including but not limited to, return to bench support, on-site support, response center support, application and technical. Customer will receive a refund that is prorated over the term of the Service Agreement, subject to a fee in the amount of 10% of the price of the cancelled Service or deleted Product. Customer will pay for all Service rendered under the scheduled Service Agreement.

Information regarding applicable Service charges is available upon request. A Service Agreement that contains more than one type of Service may only be cancelled in its entirety.

Customer may not cancel a portion of, or an individual Service offered under a Service Agreement.

Scheduled service agreements include preventive maintenance and operational qualification, which are sold either up-front or post-sales. If no services have been delivered, the customer is responsible to pay the agreement for 60 days after written notification of cancellation is received. If the services have been completely delivered, the customer is responsible for full payment through the end of the agreement period, or current year of a multi-year agreement. This also applies to scheduled services included as part of a contract bundle (e.g. Agilent CrossLab Silver). If the scheduled service has been completely delivered, the customer is responsible for the full price of the scheduled service portion of the agreement.

Technical information, service descriptions and entitlements in this document are subject to change without notice.

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Published in USA. May 13, 2015  
5989-9768EN

Revision 1.7

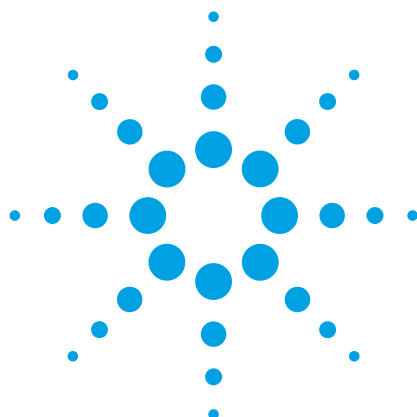
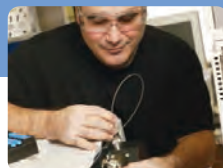


**Agilent Technologies**



# Agilent Service Guarantee

Agilent Service and Support keep your laboratory productive



With over 40 years of experience, Agilent Technologies is the world's premier measurement company and we lead the industry in providing the most reliable instrumentation and service. We are so confident in our service quality and the reliability of our instruments that we offer the Agilent Service Guarantee:

## The Agilent Service Guarantee

**Should your Agilent instrument require service while covered by an Agilent service agreement, we guarantee repair or we will replace your instrument for free.**

*No other company offers you this level of commitment to keep your laboratory operating efficiently.*





### How does the guarantee work?

When a hardware problem cannot be solved immediately, a formal escalation process ensures that key technical and management resources—including research and development, manufacturing and executive management—quickly attend to your issue. If this process does not resolve the hardware issue, we will replace your instrument for free. This escalation process exemplifies how Agilent is committed to keeping your laboratory up and running, no matter what.

### What's behind our guarantee?

Agilent is a technology leader in communications, electronics, life sciences and chemical analysis. The company's 21,000 employees serve customers in more than 110 countries.

### Why we're confident in the quality of Agilent services

Agilent Service Engineers are the most highly qualified in the industry.

- Our Service Engineers have an average of **10 years of instrument repair experience** and many are former instrument users.
- Our **training process is rigorous and continuous**, exceeding the requirements of most independent service providers and many instrument manufacturers.
- Our Service Engineers **are trained at multiple Agilent sites** around the world to gain global expertise in a wide range of situations.
- We require our Service Engineers to be **ready to support every new instrument** that goes to market.



Agilent customers worldwide report  
**98% satisfaction**  
with our Service Engineers  
(Agilent customer satisfaction survey, 2005).

### You get more than excellent service with Agilent Service Agreements

You get fast repair, typically quicker than any other manufacturer. Our world-class, factory-trained Service Engineers can quickly transform your instruments to current operating conditions. They carry a large supply of most-commonly-used parts for immediate repairs, plus they have instant access to Agilent's worldwide, world-class parts logistics centers that can send needed parts overnight.

You get:

- **Comprehensive protection** against unexpected repair costs with one fixed price.
- **Genuine Agilent parts**—designed and manufactured with the same high standard of performance and reliability as your Agilent instruments.
- **State-of-the-art resources** to diagnose, fix, upgrade and verify instrument repair.
- **Certainty in the quality of the repair**, with our industry-leading standards.
- **Confidence** in the quality of your results.

### Contact us to maximize your laboratory's productivity

To learn more about the Agilent Service Guarantee and the value you get from Agilent Service Agreements:

- Contact your local Agilent sales office or call 800-227-9770, option 1 (in the U.S. and Canada)
- Check [www.agilent.com/chem/services](http://www.agilent.com/chem/services) for details about all of our support services.

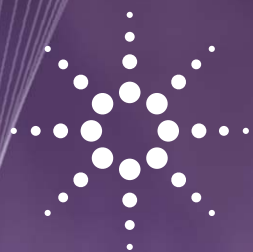
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Printed in USA January 31, 2006  
5989-3948EN



**Agilent Technologies**



Agilent Value Promise

# OUR INSTRUMENTS LAST FOR YEARS OUR COMMITMENT LASTS FOREVER

The Measure of Confidence



Agilent Technologies

## MAXIMIZE YOUR INSTRUMENT INVESTMENT

### Plan to optimize

Through the years, you've trusted Agilent Technologies to provide the instrumentation, supplies, and support needed to keep your lab running at peak performance. As each of your instruments reach the end of its useful life and as technology applications evolve, you can continue looking to Agilent to maximize the longevity of your initial investment. Let Agilent help ensure that your lab is always running at its highest level of efficiency and productivity. Plan to optimize your assets with our timely and cost-effective transition solutions.

### Promising 10 years of value



The Agilent Value Promise reflects utmost confidence in our unrivaled industry standards for quality system design and manufacturing. From the date you purchase select instruments from our leading Agilent chromatography, spectrometry, and spectroscopy product lines, our Value Promise guarantees at least 10 years' use or residual-value credit towards a replacement model upgrade. Because we stand behind our systems, our Value Promise maximizes your return on investment by assuring your purchase is safe.

The Agilent Value Promise reflects utmost confidence in our unrivaled industry standards for quality system design and manufacturing. From the date you purchase select instruments from our leading Agilent chromatography, spectrometry, and spectroscopy

### Plan a smooth transition

Long before your instrument's end-of-production date, Agilent is helping you smoothly transition by taking full advantage of our fixed-cost, multi-year support agreements for continuous support, service, and supplies, and by planning to move to the latest technology. With our wide variety of cost-effective program options, we work to meet your specific support and system requirements throughout each lifecycle. During current production, you can rely on Agilent's highly-rated support to maximize your assets. When your system reaches its end-of-production date you can expect uninterrupted support and parts, as well as a clear and strategic path to the most cost-effective transition options for optimal performance. All the while, our 10-year Value Promise stays in force to ensure your lab gets the most for its budget.

Agilent's first concern is helping you maintain optimal instrument uptime so your lab can be competitively efficient and profitable. Let our range of service options and technology transition solutions protect your investment.

*Mike McMullen*  
President and CEO, Agilent Technologies, Inc

# A PROVEN PARTNER FOR YOUR SUCCESS

At Agilent, we look for ways to optimize your lab's performance by enhancing our 45 years of measurement solutions expertise with constant customer communication. That is why you can rely on us to provide the tools you need. Proudly, the Agilent name has become the assurance of unequalled dependability, reliability, ease of use, and enhanced productivity because we rigorously design, test and manufacture our comprehensive array of instruments, supplies, and services to the highest standards. We become your experienced partner delivering unrivaled systems, solutions, technical support, and education to help your lab increase efficiency and profit.

## Plan for uninterrupted lab operation

As your instrument is phased out of production, trust the Agilent support process—from our Service Guarantee to our Value Promise. By informing you along the way, we keep you ahead of the curve in managing the lifetime of your instrument.

### AGILENT VALUE PROMISE - 10 YEARS

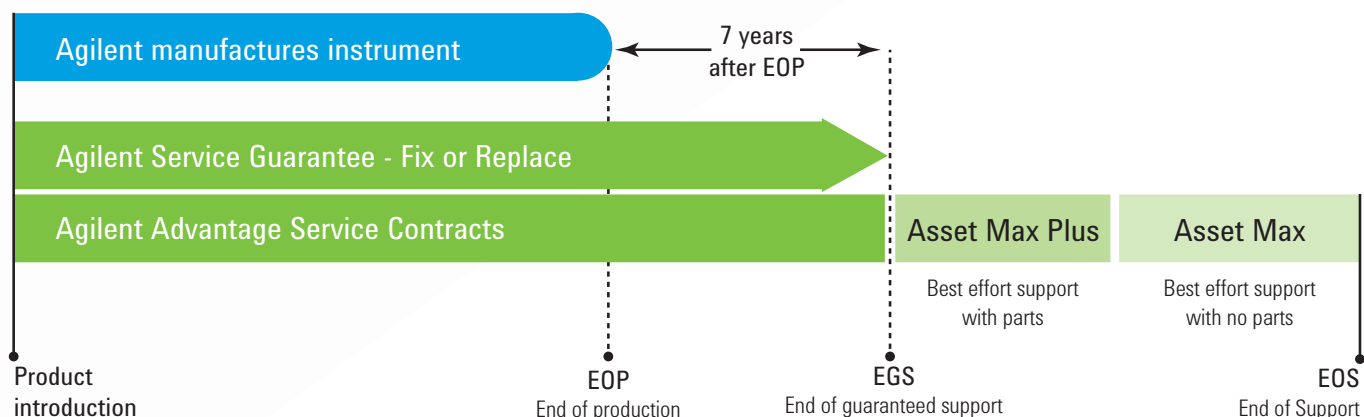
The Agilent Value Promise guarantees you at least 10 years of use of your new instrument, from the date of purchase, or we will credit you with the residual value of that system when you upgrade to a replacement model<sup>1</sup>.

### AGILENT SERVICE GUARANTEE

If you are under an Agilent Advantage contract and a hardware problem cannot be solved immediately, a formal escalation process ensures that key technical and management resources quickly attend to your issue. If this process does not resolve the hardware issue, we will replace your analytical instrument for free. This escalation process exemplifies how Agilent is committed to keeping your lab up and running, no matter what.

Purchase of Instrument

Agilent Value Promise - 10 years of usable life



<sup>1</sup> Applies to current generation Agilent instruments not being used in highly corrosive and bio-hazardous environments

## Contact Us

Learn more:

[\*\*agilent.com/chem/value\*\*](http://agilent.com/chem/value)

Find an Agilent Customer Center  
in your country:

[\*\*agilent.com/chem/contactus\*\*](http://agilent.com/chem/contactus)



An Agilent Service contract guarantees repair of your instrument or we replace it for free.

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Published in USA, October 15, 2012  
5991-1491EN



**Agilent Technologies**





**Agilent Technologies**

Agilent Technologies, Inc. 800 227 9770 telephone  
LSCA Customer Sales and Service 2850 302 993 5941 facsimile  
Centerville Road, MS 3N3 Wilmington, www.agilent.com  
DE 19808

May 18, 2017

via WVOASIS: [Tara..L.Lyle@wv.gov](mailto:Tara..L.Lyle@wv.gov)

State of West Virginia  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130  
Attn: Tara Lyle

Reference: **Solicitation No. CRFQ 1400 AGR1700000016**

Agilent Technologies, Inc. (Agilent) is pleased to respond to the above referenced Solicitation with 2 separate proposals. Agilent can Meet and Exceed **all** of the specifications In Section 3 General Requirements of the RFQ with **both** our Model 7800 and 7900 ICPMS Systems. The highly competitive proposal for the Agilent 7800 system is sufficient to meet and exceed as explained in the detailed Technical Response to the specifications.

The Agilent 7900 System will also meet and **greatly** exceed **all** of the specifications however we believe that the world's bestselling 7900 ICP-MS, which has become the instrument of choice for the large majority of all environmental laboratories nationwide, offers greatly enhanced value for the modest increase in price as demonstrated in the separate detailed Technical Response for the 7900 System.

We ask you to please evaluate both proposals and feel free to contact Agilent if you would like more clarification.

Agilent is bidding in accordance with the attached quotations **2290454** for the 7800 and **2290536** for the 7900, which are hereby incorporated by reference. Please reference the Quotation number on any award. The terms and conditions of this proposal and for any resulting order shall be subject to Agilent's standard Terms of Sale, Exhibit E16 which is attached and hereby incorporated by reference.

If you have questions regarding Agilent's products listed on the Technical Response, please contact Rick Browning at 304-840-4752. If you have other questions regarding Agilent's response, please contact the undersigned at 302-636-8071.

Sincerely yours,  
Agilent Technologies, Inc.

Tom Fenton  
Bids Technical Response Specialist





Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Request for Quotation  
13 — Equipment

Proc Folder: 317430

Doc Description: Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-05-01	2017-05-18 13:30:00	CRFQ 1400 AGR1700000016	1

**BID RECEIVING LOCATION**

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

**VENDOR**

Vendor Name, Address and Telephone Number:

Agilent Technologies, Inc.

2850 Centerville Rd.

Wilmington, DE 19808

800-227-9770

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
(304) 558-2544  
tara.l.lyle@wv.gov

Signature X

FEIN # 77-0518772

DATE 18MAY2017

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

The West Virginia Purchasing Division for the agency, the West Virginia Department of Agriculture, is soliciting bids for a one-time purchase of an Inductively Coupled Plasma Mass Spectrometry (ICP-MS), workstation PC, and software with shipping, installation, validation, warranty, training, and service, per the attached documentation.

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E  CHARLESTON WV25305-0173  US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11  CHARLESTON WV 25312  US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	ICP-MS Autosampler, computer, software	1.00000	EA	150,037.19	\$150,037.19

Comm Code	Manufacturer	Specification	Model #
41000000	Agilent Technologies, Inc.		Agilent 7900 ICPMS System

**Extended Description :**

ICP-MS Autosampler, computer, software

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E  CHARLESTON WV25305-0173  US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11  CHARLESTON WV 25312  US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Shipping Charges & Inside Delivery	1.00000	EA	0.00	0.00

Comm Code	Manufacturer	Specification	Model #
78121603	Agilent Technologies		Included in Item 1 Agilent 7900 ICPMS System

**Extended Description :**

Shipping Charges &amp; Inside Delivery

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E  CHARLESTON WV25305-0173  US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11  CHARLESTON WV 25312  US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Installation/Validation	1.00000	EA	0.00	0.00

Comm Code	Manufacturer	Specification	Model #
73171605	Agilent Technologies, Inc.	Included in Item 1 Agilent 7900 ICPMS System	

Extended Description :  
Installation/Validation

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E CHARLESTON WV25305-0173 US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11 CHARLESTON WV 25312 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Training/Warranty	1.00000	EA	7,828.00	7,828.00

Comm Code	Manufacturer	Specification	Model #
73171605	Agilent Technologies, Inc.	H2149A	

Extended Description : Agilent Method and Application Consulting On-site consulting for a maximum of 4  
Training/Warranty participants. No extra charge for std. warrant

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER 304-558-2221 AGRICULTURE DEPARTMENT OF ADMINISTRATIVE SERVICES 1900 KANAWHA BLVD E CHARLESTON WV25305-0173 US		AUTHORIZED RECEIVER 304-558-2227 AGRICULTURE DEPARTMENT OF REGULATORY PROTECTION DIVISION 313 GUS R DOUGLAS LN, BLDG 11 CHARLESTON WV 25312 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
5	Preventative maintenance	1.00000	EA	4,140.00	4,140.00

Comm Code	Manufacturer	Specification	Model #
81101706	Agilent Technologies, Inc.	SYS-IM-7900	

Extended Description : Agilent CrossLab Preventive Maintenance for 7900 ICPMS System  
Preventative maintenance

#### SCHEDULE OF EVENTS

Line	Event	Event Date
1	Technical questions due by 4:00 pm	2017-05-09

<b>AGR1700000016</b>	<b>Document Phase</b> <b>Draft</b>	<b>Document Description</b> Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	<b>Page 4</b> <b>of 4</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

## INSTRUCTIONS TO VENDORS SUBMITTING BIDS

**1. REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

**2. MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

**3. PREBID MEETING:** The item identified below shall apply to this Solicitation.

☒ A pre-bid meeting will not be held prior to bid opening

☐ A **NON-MANDATORY PRE-BID** meeting will be held at the following place and time:

☐ A **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

**4. VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: May 9, 2017 by 4:00 pm

Submit Questions to: Tara Lyle

2019 Washington Street, East

Charleston, WV 25305

Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)

Email: [Tara.L.Lyle@wv.gov](mailto:Tara.L.Lyle@wv.gov)

**5. VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

**6. BID SUBMISSION:** All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID:  
BUYER:  
SOLICITATION NO.:  
BID OPENING DATE:  
BID OPENING TIME:  
FAX NUMBER:

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression of Interest or Request for Proposal is not permitted in wvOASIS.

**For Request For Proposal ("RFP") Responses Only:** In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus N/A convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: (This only applies to CRFP)

- ☐ Technical  
☐ Cost

**7. BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: May 18, 2017 at 1:30 pm

Bid Opening Location: Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130



**8. ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

**9. BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

**10. ALTERNATES:** Any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

**11. EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

**12. COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

**13. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

**14. UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

**15. PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Vendor Preference Certificate form has been attached hereto to allow Vendor to apply for the preference. Vendor's failure to submit the Vendor Preference Certificate form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

**16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

**17. WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

**18. ELECTRONIC FILE ACCESS RESTRICTIONS:** Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

**19. NON-RESPONSIBLE:** The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance.”

**20. ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b.”

**21. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

## **GENERAL TERMS AND CONDITIONS:**

**1. CONTRACTUAL AGREEMENT:** Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☐ **Term Contract**

**Initial Contract Term:** This Contract becomes effective on \_\_\_\_\_ and extends for a period of \_\_\_\_\_ year(s).

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to \_\_\_\_\_ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed \_\_\_\_\_ months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within \_\_\_\_\_ days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days.

Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional \_\_\_\_\_ successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed \_\_\_\_\_ months in total. Automatic renewal of this Contract is prohibited.

☒ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached.

**4. NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☒ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

**7. REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☐ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of \_\_\_\_\_. The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

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The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.



**8. INSURANCE:** The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. Subsequent to contract award, and prior to the insurance expiration date, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies mandated herein, including but not limited to, policy cancelation, policy reduction, or change in insurers. The insurance coverages identified below must be maintained throughout the life of this contract. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed in this section.

Vendor must maintain:

☐ **Commercial General Liability Insurance** in at least an amount of:

\_\_\_\_\_  
\_\_\_\_\_

☐ **Automobile Liability Insurance** in at least an amount of: \_\_\_\_\_

☐ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of:

\_\_\_\_\_

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of:

\_\_\_\_\_

☐ **Cyber Liability Insurance** in an amount of: \_\_\_\_\_

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

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**9. WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

**10. LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

**11. LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount of

for \_\_\_\_\_.

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

**12. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

**13. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

**14. PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.

**15. PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

☐ Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

**16. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

**17. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

**18. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

**19. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-6.1.e.

**20. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.

**21. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

**22. COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

**23. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

**24. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

Revised 04/07/2017

**25. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

**26. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

**27. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

**28. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

**29. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

**30. BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

**31. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

**32. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**33. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

**34. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

**35. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.



Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

**36. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

**37. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

**38. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

**39. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

**40. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

**41. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☐ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.requisitions@wv.gov](mailto:purchasing.requisitions@wv.gov).

**42. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.



**43. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

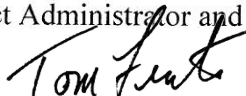
- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**44. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

 Bids Response Technical Specialist

(Name, Title)

Tom Fenton, Bids Response Technical Specialist

(Printed Name and Title)

2850 Centerville Rd., Wilmington, DE 19808

(Address)

800-227-9770 / 302-993-5941

(Phone Number) / (Fax Number)


LSCABids@agilent.com

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Agilent Technologies, Inc

(Company)



(Authorized Signature) (Representative Name, Title)

Tom Fenton, Bids Response Technical Specialist

(Printed Name and Title of Authorized Representative)

17MAY2017

(Date)

800-227-9770 302-993-5941

(Phone Number) (Fax Number)

REQUEST FOR QUOTATION  
CRFQ AGR1700000016  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**SPECIFICATIONS**

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Department of Agriculture to establish a contract for the one-time purchase of an **Inductively Coupled Plasma Mass Spectrometry (ICP-MS), workstation PC, and software with shipping, installation, validation, warranty, training, and service.**
2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
  - 2.1 **“Contract Services”** means the ICP-MS with inside delivery, installation, validation, warranty, and training.
  - 2.2 **“Deliverables”** means all items being purchased through this RFQ.
  - 2.3 **“Preventative Maintenance Plan”** means routine service conducted by the Vendor that is recommended to keep the instrument fully operational.
  - 2.4 **“Pricing Page”** means the pages, contained in wvOASIS or attached as Exhibit A, upon which Vendor should list its proposed price for the Contract Items.
  - 2.5 **“Solicitation”** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
  - 2.6 **“Validation”** means is the process used to confirm that the analytical procedure employed for a specific test or matrices is suitable for its intended use.
  - 2.7 **“Installation”** means unpacking and setting instrumentation in place with all connections secured for the instrument(s) to be in working order including software installation on the computer connected to the instrument.
  - 2.8 **“Warranty”** means the written warranty of the manufacturer of a new instrument of its condition and fitness for use, including any terms or conditions precedent to the enforcement of obligations under that warranty.
  - 2.9 **“Training”** means teaching staff on-site on how to use, and maintain the instrument and software.
  - 2.10 **“Service”** means performing routine maintenance work or repair to the instrument or software.

REQUEST FOR QUOTATION  
CRFQ AGR1700000016  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**3. GENERAL REQUIREMENTS:**

**3.1 Mandatory Contract Item Requirements:** Contract Item must meet or exceed the mandatory requirements listed below for the **Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**.

**3.1.1 Inductively Coupled Plasma Mass Spectrometry (ICP-MS).**

- 3.1.1.1 The ICP-MS must have an RF (radio frequency) plasma ion source, a quadrupole based universal cell, a quadrupole mass filter, a quadrupole ion deflector, dual stage discrete dynode detector, a triple cone interface and all under computer control. Additional equipment required is an autosampler (60 sample minimum), computer, monitor, and software for the quantitation of metals.
- 3.1.1.2 ICP-MS must be equipped with universal cell technology able to operate in standard mode, collision mode, and reaction mode.
- 3.1.1.3 Must be capable of detecting trace metals in matrices such as foods, soil, vegetation, animal feed, fertilizer and water.
- 3.1.1.4 The quadrupole must be able to scan a minimum of 5000 amu/sec.
- 3.1.1.5 High mass range must be 285 amu or greater.
- 3.1.1.6 Must have full compliance or exceed performance of US EPA methodology for Method 200.8; Method SW 846-6020; FDA Forensic Chemistry Center SOP T026 (002); AOAC 968.08D; AOAC 985.01; AOAC 2006.03; AOAC 965.09; AOAC 982.01.
- 3.1.1.7 The instrument operates in helium collision cell mode to eliminate interference for isobaric polyatomic species via kinetic energy discrimination.
- 3.1.1.8 Tuning for low oxide and low double charged species is important for minimizing interference.
- 3.1.1.9 Capable to switch between hydrogen and helium reaction gas
- 3.1.1.10 All analytical system operations from component optimization to methods development, calibration, analysis and to reports must be able to be performed using a single software program.
- 3.1.1.11 System must have a full color plasma view window for useful visuals on the sampler cone, plasma color and injector tip.

REQUEST FOR QUOTATION  
**CRFQ AGR1700000016**  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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- 3.1.2.2 Capable of manually entering weights, volumes and a unique run label.
- 3.1.2.3 Automatically calculates dilution factor.
- 3.1.2.4 Operating system must be fully integrated to control ICP-MS.
- 3.1.2.5 Software updates will be provided at no additional cost.
- 3.1.2.6 Computer includes mouse, minimum 19 inch color monitor, keyboard, DVD-RW drive, at least 2 USB ports, and printing capabilities.

**3.1.3 Shipping**

- 3.1.3.1 Equipment must be delivered within 90 Days after receipt of order.
- 3.1.3.2 The bidder must explain the details of its proposed packaging sizes for the deliverable(s). All equipment must be packaged and capable of fitting through access doors.

**3.1.4 Installation**

- 3.1.4.1 Vendor must be on-site for delivery and perform the installation (labor and supplies included) of the ICP-MS.
- 3.1.4.2 The vendor must provide a written validation of the instrument's performance after installation.
- 3.1.4.3 Installation shall be performed by the Vendor who shall agree to have an adequate number of trained staff and materials within 30 days of completion of the installation checklist.

**3.1.5 Validation**

- 3.1.5.1 The vendor must provide a written validation of the instrument's performance after installation.

**3.1.6 Warranty**

- 3.1.6.1 Vendor will provide a full one-year parts and labor warranty on all items, including preventative maintenances that are recommended by the Vendor's preventative maintenance service plans.



REQUEST FOR QUOTATION  
**CRFQ AGR1700000016**  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**3.1.7 Training**

- 3.1.7.1 Vendor will provide on-site training (labor and non-consumable supplies included) for all instruments and software.

**3.1.8 Preventative Maintenance**

- 3.1.8.1 Preventative maintenance services shall be performed by the Vendor who shall agree to have an adequate number of trained staff and replacement parts available in order to comply with the requirements in 3.1.8.2 and 3.1.8.3.
- 3.1.8.2 Vendor must respond to service calls within 24 hours.
- 3.1.8.3 Vendor must be capable of performing all requests for repairs and/or service within three business days of request.
- 3.1.8.4 After any preventative maintenance or repairs have been completed on a particular instrument, the Vendor shall guarantee the accuracy and precision of the instrument at the location where the instrument will be used.
- 3.1.8.5 Reports of service will be signed by State of WV authorized laboratory personnel to ensure work has been completed.

**4. CONTRACT AWARD:**

**4.1 Contract Award:** The Contract is intended to provide Agencies with a purchase price for the Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.

**4.2 Pricing Page:** Vendor should complete the Pricing Page by placing all inclusive information in each column for item number, model/brand name, unit price and extended amount. There should be a price for the ICP-MS, autosampler, workstation, software, shipping/inside delivery, installation, validation, warranty, there is no charge for any deliverable, indicate in the cell with "no charge". The bidder/vendor information must be completed and include an authorize signature. Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified.

Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.



REQUEST FOR QUOTATION  
CRFQ AGR1700000016  
Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument

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**5. PAYMENT:**

**5.1 Payment:** Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

**6. DELIVERY AND RETURN:**

**6.1 Shipment and Delivery:** Vendor should ship the Contract Items within 90 days after being awarded this Contract and receiving a purchase order or notice to proceed. Contract Items must be delivered to Agency at 313 Gus R. Douglass Lane, Charleston, WV 25312.

**6.2 Late Delivery:** The Agency placing the order under this Contract must be notified in writing if the shipment of the Contract Items will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the Contract, and/or obtaining the Contract Items from a third party.

Any Agency seeking to obtain the Contract Items from a third party under this provision must first obtain approval of the Purchasing Division.

**6.3 Delivery Payment/Risk of Loss:** Vendor shall deliver the Contract Items F.O.B. destination to the Agency's location.

**6.4 Return of Unacceptable Items:** If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

**6.5 Return Due to Agency Error:** Items ordered in error by the Agency will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

**REQUEST FOR QUOTATION**  
**CRFQ AGR1700000016**  
**Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Instrument**

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**7 VENDOR DEFAULT:**

7.1 The following shall be considered a vendor default under this Contract.

7.1.1 Failure to provide Contract Items in accordance with the requirements contained herein.

7.1.2 Failure to comply with other specifications and requirements contained herein.

7.1.3 Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

7.1.4 Failure to remedy deficient performance upon request.

7.2 The following remedies shall be available to Agency upon default.

7.2.1 Immediate cancellation of the Contract.

7.2.2 Immediate cancellation of one or more release orders issued under this Contract.

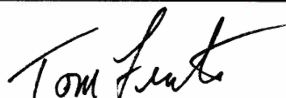
7.2.3 Any other remedies available in law or equity.

**8 FACILITIES ACCESS:** Performance of Services will require access to the facility.

8.1 Vendor must identify principal service personnel who will be asked for identification upon entrance to the facility.

8.2 Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

**CRFQ AGR1700000016 - PRICING PAGE**

Item No.	Description	Model No/Brand Name	Quantity	Unit Price	Extended Amount
3.1.1	ICP-MS, autosampler,computer, software	Agilent 7900 ICP-MS with Data System, Software and SPS-4 Autosampler	1 ea	\$150,037.19	\$150,037.19
3.1.1	Shipping charges and inside delivery	Included with Item 3.1.1 AGILENT will coordinate delivery with installation date.	1 ea	0.00	\$0.00
3.1.4	Installation/validation	Included with Item 3.1.1	1 ea	\$0.00	\$0.00
3.1.7	Training/warranty	Agilent Method and Application Consulting On-site consulting for a maximum of 4 participants. No extra charge for std. warranty	1 ea	\$7,828.00	\$7,828.00
3.1.8	Preventative maintenance	Agilent CrossLab Preventive Maintenance for 7900 ICPMS System	1 ea	\$4,140.00	\$4,140.00
	Failure to use this form may result in disqualification			<b>OVERALL TOTAL COST:</b>	162,005.19
	Bidder / Vendor Information				
Name:	AGILENT TECHNOLOGIES, INC.				
Address:	2850 CENTERVILLE RD.				
	WILMINGTON,DE 19808				
Phone:	800-227-9770				
Email Address:	LSCABids@agilent.com				
Authorized Signature:	 Tom Fenton, Bids Response Technical Specialist				

STATE OF WEST VIRGINIA  
Purchasing Division

## PURCHASING AFFIDAVIT

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: AGILENT TECHNOLOGIES, INC.

Authorized Signature:  Date: 17MAY2017

State of Delaware

County of New Castle, to-wit:

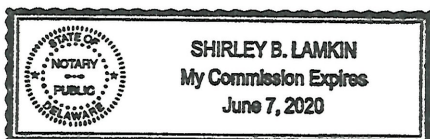
Taken, subscribed, and sworn to before me this 17 day of May, 2017.

My Commission expires June 7, 2020.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** 

*Purchasing Affidavit (Revised 08/01/2015)*





## State of West Virginia

**VENDOR PREFERENCE CERTIFICATE**

Certification and application is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

**1. Application is made for 2.5% vendor preference for the reason checked:**

- ☐ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
- ☐ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
- ☐ Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or**,
- ☐ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,

**2. Application is made for 2.5% vendor preference for the reason checked:**

- ☐ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

**3. Application is made for 2.5% vendor preference for the reason checked:**

- ☐ Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or**,

**4. Application is made for 5% vendor preference for the reason checked:**

- ☐ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,

**5. Application is made for 3.5% vendor preference who is a veteran for the reason checked:**

- ☐ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,

**6. Application is made for 3.5% vendor preference who is a veteran for the reason checked:**

- ☐ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

**7. Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.**

- ☐ Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

**Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.**

Bidder: \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

\*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.



## Agilent Technologies

Brenda Keavey  
West Virginia Department of  
Agriculture  
4720 Brenda Lane Bldg 11  
CHARLESTON WV 25312-9301

TEL: 304 558 2208 FAX: 304 558 3594

## Quotation

Quote No.	Create Date	Delivery Time	Page
2290536	05/15/2017	7 Weeks	1 of 8
Contact	Phone no.	Valid to	
Rick Browning	304-840-4752	07/14/2017	
To place an order: Call 1-800-227-9770 Option 1 For Instruments Fax : 302-633-8953 Email : LSCAinstrumentsales@agilent.com For Consumables Fax : 302-633-8901 Email : CAG_sales-NA@agilent.com For Genomics Fax: 512-321-3128 Email : orders@agilent.com For additional instructions, see last page			

CRFQ 1400 AGR1700000016 18MAY2017

Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
<b>G8403A</b>	1.000 EA	198,147.00 USD	69,351.45-	128,795.55
Agilent 7900 ICP-MS mainframe with He cell gas line.  With the following configuration: Ship-to Country : USA  Ultra HMI (UHMI) Installation (44K) Familiarization at Installation (44L)  Special discount of 35.00 % is applied.				
<b>G7215C</b>	1.000 EA	13,991.00 USD	4,896.85-	9,094.15
ICP-MS Workstation PC bundle for 7700, 7800, 7900, 8800 and 8900. Includes PC, Windows 7 64 bit OS, Monitor and Printer but does not include ICP-MS MassHunter software license for ICP-MS instrument if either of option #001-#005 is not selected.  With the following configuration: Ship-to Country : USA MassHunter Software For 7900 ICP-MS Installation (44K) 1 Year SW Update/Phone Assist (44W)  Special discount of 35.00 % is applied.				
<b>G7206C</b>	1.000 EA	3,041.00 USD	1,064.35-	1,976.65

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Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
ICP-MS MassHunter Intelligent Sequence Software option. Provides comprehensive real-time QC, action on failure and reporting functions for compliance with US EPA and similiar requirements for 7700, 7800, 7900, 8800 and 8900.  With the following configuration: Ship-to Country : USA  Installation (44K) Familiarization at Installation (44L)  Special discount of 35.00 % is applied.				
<b>5185-5850</b>	1.000 EA	<b>613.00 USD</b>	<b>214.55-</b>	<b>398.45</b>
ICP-MS Checkout Solutions Installation checkout solutions kit required by the Agilent installation engineer to validate the Agilent 7700 performance on site. Contains tuning solution, dual mode (1), dual mode(2), wash and water blank solutions  Special discount of 35.00 % is applied.				
<b>G1879B</b>	1.000 EA	<b>1,717.00 USD</b>	<b>600.95-</b>	<b>1,116.05</b>
Heat exchanger PolyScience Model 3370 Air Cooled Recirculator				



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Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
With the following configuration: Ship-to Country : USA  Special discount of 35.00 % is applied.				
<b>CP17976</b>	1.000 EA	<b>618.00 USD</b>	<b>216.30-</b>	<b>401.70</b>
Gas Clean Carrier Gas filter kit (includes 1 connecting unit 1/8" and 2 Carrier Gas filters)				
Special discount of 35.00 % is applied.				
<b>8710-1709</b>	1.000 EA	<b>32.30 USD</b>	<b>11.31-</b>	<b>20.99</b>
Cutter, tube				
Special discount of 35.00 % is applied.				
<b>G3270-65035</b>	1.000 EA	<b>204.00 USD</b>	<b>71.40-</b>	<b>132.60</b>
Stainless steel tubing, 1/8in od, 6m. Used for For external cell gas line				

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Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
Special discount of 35.00 % is applied.				
<b>CP7981</b>	1.000 EA	<b>41.15 USD</b>	<b>14.40-</b>	<b>26.75</b>
Wall Mounting Bracket, Gas Clean Wall Mounting Bracket for 1-position connecting unit only				
Special discount of 35.00 % is applied.				
<b>0101-1536</b>	1.000 EA	<b>342.00 USD</b>	<b>119.70-</b>	<b>222.30</b>
Gas regulator, Helium for ICP-MS. 2 stage, brass body, stainless steel diaphragm, CGA580 Inlet 3000psi, 15psi outlet, 30psi gauge + 1/8" Swagelok.				
Special discount of 35.00 % is applied.				
<b>G8415A</b>	1.000 EA	<b>12,080.00 USD</b>	<b>4,228.00-</b>	<b>7,852.00</b>
SPS 4 autosampler for ICP-MS products. Optional cover kit not included.  With the following configuration: Integrated Cover Kit (002) : Selected Extraction Duct Hosing (003) : Selected Pumped Drain Kit (007) : Selected Ship-to Country : USA				

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Email : CAG_sales-NA@agilent.com			
For Genomics Fax: 512-321-3128			
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Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
<del>SPS 4 Integrated cover kit</del> Duct Hose 50mm-id SPS 4 Pumped Drain Kit Installation (44K) Familiarization at Installation (44L)				
Special discount of 35.00 % is applied.				
<b>H2149A</b>	1.000 EA	<b>9,785.00 USD</b>	<b>1,957.00-</b>	<b>7,828.00</b>
Method and Application Consulting On-site consulting for a maximum of 4 participants. Certificates and manuals not included.  With the following configuration: Ship-to Country : USA Three Day On-site (Includes Travel)				
Special discount of 20.00 % is applied.				
<b>SYS-IM-7900</b>	1.000 EA	<b>5,175.00 USD</b>	<b>1,035.00-</b>	<b>4,140.00</b>
ICPMS 7900 System  With the following configuration: Ship-to Country : USA  CrossLab Preventive Maintenance				
Special discount of 20.00 % is applied.				



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Product/Description	Qty/Unit	Unit List Price	Discount Amount	Extended Net Price
		Gross Amount	: \$	245,786.45
		Total Discount	: \$	83,781.26
		Net Amount	: \$	162,005.19
		<b>Total</b>	<b>: \$</b>	<b>162,005.19</b>

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To place an instrument and/or software order, please fax the order to 302-633-8953.  
To place an order for Genomics, please fax the order to 512-321-3128, or email to [orders@agilent.com](mailto:orders@agilent.com)
- 4) Or you can mail your order to:  
Agilent Technologies  
North American Customer Contact Center  
2850 Centerville Road BU3-2  
Wilmington, DE 19808-1610

## To place an order, the following information is required:

- Purchase order number or credit card, delivery date, ship to, invoice to, end user, and quote number.
- GSA customers please provide GSA contract #.

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- Pricing: Web prices are provided only for the U.S. in U.S.dollars. All phone prices are in local currency and for end use. Applicable local taxes are applied.
- All Sales Tax is subject to change at the time of order.
- Shipping and Handling Charges: Orders with a value less than \$4000 or those requiring special services such as overnight delivery may be subject to additional shipping & handling fees. Some of these charges may be avoided by ordering via the Web
- Payment Terms: Net 30 days from invoice date, subject to credit approval.

\* Quotation Validity: This quotation is valid for 60 days unless otherwise indicated.

\* Warranty period for instrumentation is 1 year. The Warranty period for columns and consumables is 90 days.

Visit [www.agilent.com/chem](http://www.agilent.com/chem)

- For Training course information and registration including e-Seminars, select [Education](#).
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It is Agilent Technologies intent to ship product at the earliest available date unless specified otherwise.

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- b) To the extent that limitation is permitted by law, Agilent's liability to Customer is limited to US \$1,000,000 for Custom and Vacuum Products and/or Services adapted to meet Customer requirements.
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- d) The remedies in these Terms are Customer's sole and exclusive remedies.

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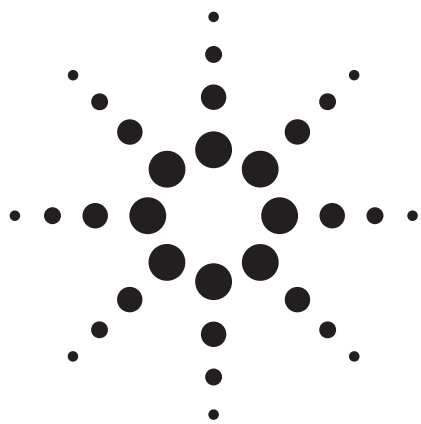
Agilent 7900 ICP-MS

**RAISE YOUR EXPECTATIONS  
WITH THE NEXT GENERATION  
OF ICP-MS**

The Measure of Confidence



**Agilent Technologies**



## Agilent 7900 ICP-MS

### Specifications



### **Raise your expectations with the next generation of ICP-MS**

The Agilent 7900 ICP-MS rewrites the rules of ICP-MS. New technologies and a redesigned software platform combine to make the 7900 ICP-MS the world's most powerful, and most automated quadrupole ICP-MS.

Some key components, such as the RF generator and quadrupole mass analyzer, are shared with the field-proven 7700 Series ICP-MS and 8800 ICP-QQQ. However, the Agilent 7900 ICP-MS has been re-engineered from the bench up, with every component optimized for the demands of busy laboratories today, and in the future.



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## Instrument hardware

### Sample introduction

**Nebulizer:** Concentric nebulizer with low sample flow rate as standard (~0.2 mL/min)

**Spray chamber:** Quartz, low-volume, Scott-type double-pass spray chamber, provides improved removal of larger aerosol droplets, compared to cyclonic or impact-bead designs. Peltier-cooling eliminates the need for a separate external cooling water supply.

- Controlled temperature range: -5 °C to +20 °C (with instrument cooling water at 15–30 °C)

**Peristaltic pump:** Low-pulsation, high-precision, 10-roller peristaltic pump, with three separate channels for precise delivery of sample and internal standard (ISTD), plus spray chamber drain.

**Ultra High Matrix Introduction (UHMI):** Agilent's unique UHMI aerosol dilution technology (option), extends the matrix tolerance of the Agilent 7900 ICP-MS, allowing routine analysis of samples containing tens of % levels of total dissolved solids (TDS), while eliminating the added costs, time and potential errors of conventional liquid dilution.

### Plasma

**RF generator:** High power-transfer efficiency and maintenance-free solid state digital drive 27 MHz RF generator with variable-frequency impedance matching. Provides significantly improved tolerance of changes in sample matrix; even highly volatile organic solvents can be introduced without affecting plasma stability.

- RF power range: 500 W to 1600 W

**Torch:** Easy-mount, one-piece quartz torch with 2.5 mm internal diameter injector. The exceptionally wide torch injector produces a highly robust plasma that efficiently

decomposes the sample matrix, reducing many interferences and minimizing routine interface cleaning.

**Torch position:** Stepper-motor controlled in three axes (horizontal, vertical and sampling depth) in 0.1 mm steps. The torch is automatically realigned with the interface following maintenance.

- Horizontal and vertical position range:  $\pm 2$  mm
- Sampling depth: 3 to 28 mm

**ShieldTorch System:** Agilent's unique ShieldTorch System (STS) precisely controls plasma potential and ion energy — essential to achieve high performance He mode.

**Robust preset plasma conditions:** Plasma conditions on the 7900 ICP-MS are robust and easily reproduced using the pre-set plasma function within MassHunter — no manual tuning is required. Consistent hardware engineering ensures that operating conditions can be precisely set and consistently applied from day to day and with different operators.

Signal suppression for high ionization potential elements such as Be, Zn, As and Cd in 10 vol% HNO<sub>3</sub> matrix is typically less than 10% (Plasma mode: General Purpose).

### Interface

**Sampling cone:** 1 mm diameter orifice, Ni-tipped or Pt-tipped (option) with Cu base. Easy access to the interface region for routine maintenance; no tools are required for removal/refitting of sampling cone. The large cone-retaining ring ensures reliable thermal contact and reproducible fitting, even with different operators, giving dependable long-term performance.



**Skimmer cone:** 0.45 mm diameter orifice, Ni or Pt-tipped (option). Precisely controlled skimmer tip temperature ensures minimal matrix condensation, providing good tolerance to high matrix samples. Small skimmer orifice reduces matrix contamination of the high vacuum region, reducing maintenance.

### **Ion Lens**

The ion lens provides high ion transmission ( $> 1\text{GHz/ppm}$  sensitivity at  $<2.5\%$  CeO/Ce) and low backgrounds to deliver superior detection limits. The ion lens design also ensures that fixed voltages can be used to achieve optimum ion transmission across the mass range.

**Extraction lens:** Positioned behind the skimmer cone, the extraction lens focuses the ions as they enter the intermediate vacuum stage, minimizing space charge effects and reducing mass bias.

**Off-axis Omega lens:** This double deflection lens protects the ORS<sup>4</sup> cell and high vacuum region from contamination, by rejecting neutral species from the ion beam. This contributes to the minimal mass bias and low background noise.

### **Octopole Reaction System**

The 7900 ICP-MS incorporates a new, 4<sup>th</sup> generation cell, the ORS<sup>4</sup>, which provides fast cell gas switching and the most effective interference removal using kinetic energy discrimination (KED) in He mode.

**Octopole:** The octopole ion guide provides superior ion focusing, minimizing ion scattering and ensuring that high sensitivity is maintained at the high cell pressures required for effective KED.

**He cell mode as standard:** Only the combination of narrow ion energy distribution (due to ShieldTorch) and the 7900 ICP-MS's unique octopole-based cell enables efficient removal of interferences using an inert cell gas (He) and KED. The use of He cell gas also eliminates safety issues related to reactive gases such as H<sub>2</sub>, H<sub>2</sub> mixes or NH<sub>3</sub>.

**Cell gas control:** The 7900 ICP-MS has a single He cell gas controller as standard. A second or third cell gas line can be added to permit the use of reactive cell gases such as H<sub>2</sub>, xenon or ammonia. If multiple cell gases are used in a method, the cell gas is automatically changed with minimal switching time ( $\sim 5$  sec).

### **Mass Analyzer**

**Quadrupole mass spectrometer:** The 7900 ICP-MS uses a true hyperbolic quadrupole, unique in ICP-MS, operating at high (3 MHz) frequency. A hyperbolic profile quadrupole provides superior ion transmission, resolution and abundance sensitivity at standard settings, so eliminating the need for multiple resolution settings to separate adjacent peaks.

- Mass range: 2–260 amu
- Mass scan speed:
  - Slew rate (Li to U, no intervening peaks): 56.6 million amu/s
  - Scan speed (Li to U, plus data collection at 40 intervening masses):  $>3,000$  amu/s
- Abundance Sensitivity (at Cs):
  - Low Mass side:  $5 \times 10^{-7}$
  - High Mass side:  $1 \times 10^{-7}$



**Orthogonal detector system (ODS):** The ODS delivers higher sensitivity, lower background, and a wider linear dynamic range — up to 11 orders of magnitude from 0.1 cps to 10 Gcps.

Fast measurement of transient signals is provided, due to the use of a proprietary analog amplifier, which operates at the same short integration time (100 µsec) in both pulse and analog mode. There is no settling time between measurements in fast TRA mode.

### **Vacuum system**

Three-stage differential vacuum system using a single, split-flow turbo molecular pump and single external rotary pump for fast pump-down and simple maintenance. Unique Auto recover mode returns the 7900 ICP-MS to standby (pumping) state when electrical power is resumed after a power failure, saving valuable time. No need to manually start the vacuum system following an overnight power failure.

### **Software**

Agilent ICP-MS MassHunter features a dashboard layout with gadgets that guide you through every step of your analysis – hardware configuration, instrument optimization, sample acquisition and data analysis. This user-friendly interface makes learning and using the software easier and more intuitive, without compromising power and flexibility for advanced or research applications.

MassHunter includes:

- An innovative matrix-specific Method Setup Wizard, enabling all users, experienced and new, to consistently obtain high-quality data with confidence
- Batch-at-a Glance data table with real-time update, including all sample data, ISTD/QC signal trend and calibration curves
- Built-in outlier and LabQC checks

### **Optional software**

The power of ICP-MS MassHunter can be extended through a choice of software options:

**User Access Control:** Provides multi-level user logon control for enhanced security and audit, with three levels of access authority, record of user name, Operating System lock and more.

With Agilent's OpenLAB Data Store, ECM, or Spectroscopy Database Administrator (SDA), ICP-MS MassHunter with User Access Control satisfies compliance requirements including US FDA 21 CFR Part 11.

**Chromatographic software:** Fully integrated Agilent LC and GC method setup, instrument control, sequencing, and chromatographic data analysis. Permits automatic sequence recalibrations, retention time and ion ratio updates, Compound Independent Calibration, Snapshot, automated report generation and more.

**Intelligent Sequencing** provides comprehensive, configurable QA/QC functionality for automatic QA/QC checks and actions during unattended operation. Includes templates for QC reports for standard methods such as US EPA 6020 and 200.8. For full details of Agilent ICP-MS MassHunter software for the 7900 ICP-MS, 7700 Series ICP-MS and 8800 ICP-QQQ, see separate ICP-MS MassHunter Specifications.

## Guaranteed performance

For each specification, the actual instrument factory test certificate of Guaranteed Performance is included with every 7900 ICP-MS instrument.

Specification (units)	Element/Ratio	7900 ICP-MS
Sensitivity (Mcps/ppm)	Li (7)	55
	Y (89)	320
	Tl (205)	250
Background (cps)	No gas (9 u)	1
Oxide ratio (%)	CeO/Ce	1.5
	CeO/Ce (HMI-25)	0.5
Doubly-charged ratio (%)	Ce <sup>2+</sup> /Ce	3
No gas mode detection limits (ppt)	Be (9)	0.2
	In (115)	0.05
	Bi (209)	0.08
He mode detection limits (ppt) *	As (75)	20
	Se (78)	40
H <sub>2</sub> mode detection limits (ppt) **	Se (78)	1
Short-term stability (%RSD)	Li, Y, Tl	2
Long-term stability (%RSD)	Li, Y, Tl	3
Isotope ratio precision (%RSD)	Ag (107)/Ag (109)	0.1

\* He mode detection limits for As and Se are performed in a matrix of 1% HNO<sub>3</sub>, 2% HCl and 100 ppm Ca, demonstrating the effective removal of both ArCl and CaCl interferences. All other tests are performed in a matrix of 1% HNO<sub>3</sub>

\*\* Applies when optional H<sub>2</sub> cell gas line is fitted

## Site requirements and safety

### Dimensions

Mainframe	Width	730 mm (main cabinet, excluding peripump)
	Depth	600 mm (main cabinet, excluding power cord)
	Height	595 mm (main cabinet, excluding exhaust chimney)
	Weight	100 kg
Largest shipping container	Width	1,020 mm
	Depth	1,120 mm
	Height	1,000 mm
	Weight	148 kg

### Environmental

Operating temperature	Range	15–30 °C
	Rate of change	<2 °C/hr (max. change 5 °C)
Operating humidity	Range	20% to 80% (non condensing)

### Utilities

Electricity supply	Voltage	Single Phase, 200–240 V, 50/60 Hz
	Current	30 A
Cooling water	Inlet temperature	15–40 °C
	Minimum flow rate	5 L/min
	Inlet pressure	230–400 kPa (33–58 psi)
Argon gas supply	Minimum purity	99.99%
	Maximum flow rate	20 L/min
	Supply pressure	500–700 kPa (71–100 psi)
Cell gas supply	Minimum purity	99.999%
	Maximum flow rate	12 mL/min for He and 10 mL/min for H <sub>2</sub>
	Supply pressure	90–130 kPa (13–18.8 psi) for He and 20–60 kPa (2.9–8.7 psi) for H <sub>2</sub>
Exhaust duct	Vent type	Single vent, 150 mm diameter
	Flow rate	5–7 m <sup>3</sup> /min

### Regulatory compliance

Safety	IEC 61010-1:2001 / EN 61010-1:2001, CAN/CSA C22.2 No.61010-1-04, UL No.61010-1  IEC 61010-2-061:2005, CAN/CSA C22.2 No.61010-2-061-04  IEC 61010-2-081:2001+A1 (2003), CAN/CSA C22.2 No.61010-2-081-04
EMC	IEC 61326-1:2005 / EN 61326-1:2006, ICES-001:2006, AS/NZS CISPR 11: 2011
ISO	Manufactured at an ISO 9001 and ISO 14001 certified facility

### Standard mainframe configuration

Nebulizer (concentric)	MicroMist (borosilicate glass)
Spray chamber (Scott double-pass)	Quartz
Torch (with ShieldTorch System)	Quartz, 2.5 mm ID injector
Ultra High Matrix Introduction (UHMI)	Option
Interface cones	Ni
Plasma Mass Flow Controllers (Ar)	4
Option gas line for alternative carrier or make-up gases such as 20% O <sub>2</sub> /Ar for organics, or He for laser	Option
He (collision) cell gas line	Included
H <sub>2</sub> (reaction) cell gas line	Option
3 <sup>rd</sup> cell gas line (low- or high-flow rate options)	Option

Note: Refer to publication 5991-3780EN for 7900 ICP-MS  
Specifications with option 200 (semiconductor  
configuration).

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**Agilent Technologies**

RAISE YOUR EXPECTATIONS

## THE AGILENT 7900 ICP-MS OPENS UP A NEW DIMENSION IN QUADRUPOLE ICP-MS

**Could the world's bestselling quadrupole ICP-MS *really* get 10 times better?  
The answer is *yes*.**

With 10x higher matrix tolerance, 10x wider dynamic range, 10x better signal to noise, and software so powerful it can write your methods for you, the new Agilent 7900 redefines ICP-MS... *again*.

Innovative technology and a new MassHunter software platform combine to make the Agilent 7900 the world's most powerful, and most automated quadrupole ICP-MS.

With matrix tolerance extended into the tens of % TDS range, a linear dynamic range of up to 11 orders of magnitude — plus the industry's most effective helium collision mode — the Agilent 7900 ICP-MS delivers superior data quality whatever your application.



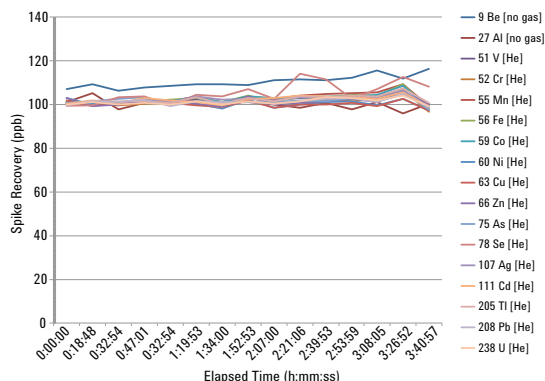
With automated setup, faster analysis, better interference removal, and a simplified MassHunter software interface, the Agilent 7900 ICP-MS blends high performance with unprecedented ease-of-use.

# Unrivalled performance driven by hardware innovation

## Unprecedented matrix tolerance

Historically, ICP-MS has been limited to samples that contain <0.2% total dissolved solids (TDS). A robust plasma (indicated by a CeO/Ce ratio <1%) enables the 7900 ICP-MS to easily tolerate this matrix level.

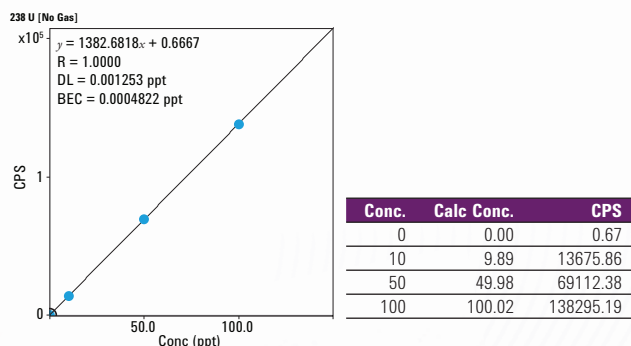
The ultra high matrix introduction (UHMI) option enables you to routinely measure samples containing up to 25% TDS — 100 times higher than the traditional limit, and far beyond the capability of any other ICP-MS.



Long-term (3.5 hours) stability of 100 µg/L spike in 25% NaCl brine

## Better trace-level detection

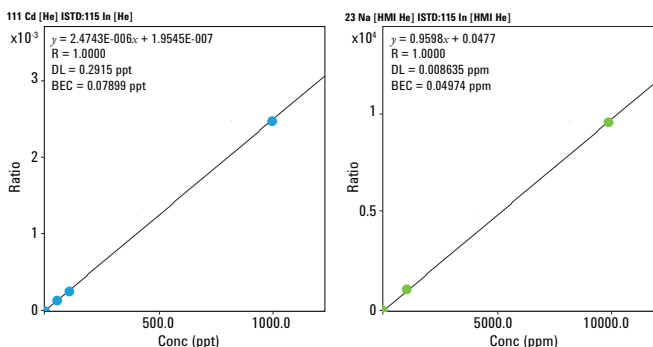
A novel interface design and optimized expansion-stage vacuum system increase ion transmission, providing >10<sup>9</sup> cps/ppm sensitivity at <2% CeO. What's more, the new orthogonal detector reduces background, dramatically improving signal to noise for lower detection limits and more accurate ultra-trace measurements.



<sup>238</sup>U calibration demonstrating sensitivity >1.38 GHz/ppm and BEC < 0.5 ppq

## The widest dynamic range of any quadrupole ICP-MS

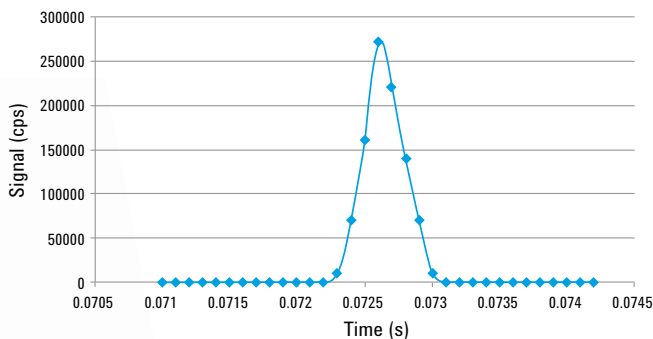
The new orthogonal detector system (ODS) delivers up to **11 orders of magnitude dynamic range**, from sub-ppt to percent-level concentrations. That means you can measure trace elements and majors in the **same run**, simplifying method development and virtually eliminating over-range results.



Calibrations for Cd (BEC < 0.1 ppt) and Na (top standard 10,000 ppm (1%))

## Faster analysis of transient signals

Fast transient signal measurement — used for applications such as capillary chromatography, single-nanoparticle analysis, and laser ablation — requires an instrument with very short integration times. The 7900 ICP-MS provides ultra-fast data acquisition, with 10,000 separate measurements per second.



Time Resolved Analysis signal for single 30 nm Au nanoparticle (dwell time 0.1 ms)



## USABILITY BY DESIGN

Every component of the Agilent 7900 ICP-MS is engineered for performance and reliability

Based on Agilent's long history of ICP-MS technological leadership embodied in the 7700 Series ICP-MS and 8800 ICP-QQQ, the Agilent 7900 ICP-MS has been re-engineered from the bench up, with every component optimized for the demands of busy laboratories today... and in the future.



### SAMPLE INTRODUCTION

The standard low-flow, Peltier-cooled sample introduction system increases operational stability and consistency. The Integrated Sample Introduction System (ISIS 3) adds a piston pump and close-coupled 7-port valve for high-speed discrete sampling.



### ULTRA HIGH MATRIX INTRODUCTION (UHMI)

Increases matrix tolerance up to 25% total dissolved solids (TDS). UHMI also improves plasma robustness, dramatically reducing matrix suppression.

### PLASMA AND SHIELD TORCH SYSTEM (STS)

Provides precise ion energy control, ensuring high sensitivity and effective interference removal in helium mode. The torch auto-aligns with the interface following maintenance.

### INTERFACE AND CONES

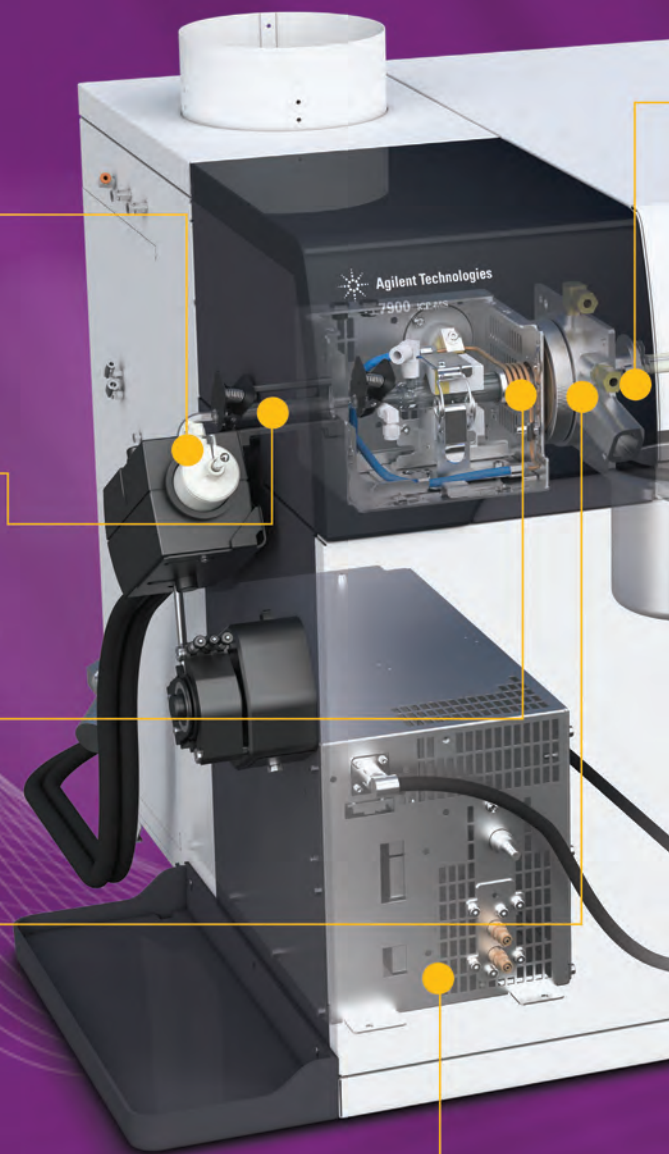
Standard Ni, or optional Pt-tipped cones increase ion transmission and matrix tolerance. Screw-threaded for easy removal during maintenance.

### COMPACT BENCHTOP DESIGN

The world's smallest ICP-MS system saves valuable bench space while ensuring easy access for servicing and maintenance.

### 27 MHz PLASMA RF GENERATOR

The fast, frequency-matching RF generator increases the tolerance of changing matrices. Even volatile organic solvents can be introduced without affecting plasma stability.





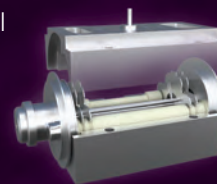


### OFF-AXIS ION LENS

Improves ion transmission across the mass range, *without* the need for mass-specific voltage optimization.

### 4TH-GENERATION OCTOPOLE REACTION SYSTEM (ORS<sup>4</sup>)

Temperature-controlled collision/reaction cell with a new gas controller for fast cell gas switching in less than 3 seconds.



### OCTOPOLE ION GUIDE

The octopole provides superior interference removal by KED in helium collision mode, and has been field-proven in thousands of Agilent ICP-MS installations.

### HYPERBOLIC QUADRUPOLE

The *only* hyperbolic quadrupole used in ICP-MS. It delivers superior peak separation and abundance sensitivity, without the need for custom quadrupole settings to separate adjacent peaks.

### ORTHOGONAL DETECTOR SYSTEM (ODS)

The ODS delivers higher sensitivity, lower background, and a wider measurement range — up to 11 orders of magnitude from 0.1 cps to 10 Gcps — virtually eliminating over-range results.



### VACUUM SYSTEM

A single, high-performance split-flow turbo pump and external rotary pump optimize vacuum in the interface region, increasing sensitivity while improving matrix tolerance.

### AGILENT PARTS AND SUPPLIES

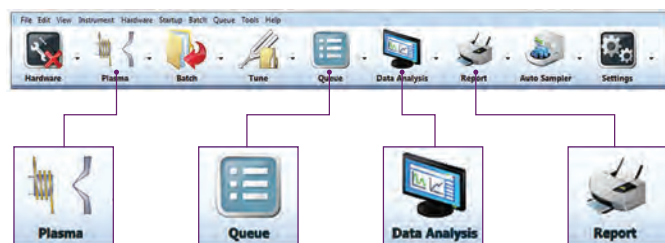
Manufactured to stringent specifications, and rigorously tested to ensure top quality and maximize instrument performance.



## THE WORLD'S MOST POWERFUL ICP-MS SOFTWARE

### Simplify your workflow

Our next generation ICP-MS MassHunter software features a dashboard layout with gadgets that guide you through every step of your analysis: hardware configuration, instrument optimization, sample acquisition, data analysis and reporting. This user-friendly interface makes learning and using the software easier and more intuitive, without compromising power and flexibility for advanced or research applications.



### Automate your method development

ICP-MS MassHunter now includes an innovative matrix-specific Method Setup Wizard, enabling all users, experienced and new, to consistently obtain high-quality data. Simply answer a few questions about your application — or introduce a typical sample — and let the Wizard build a fully functional method for you.

### Monitor and control your instrument *whenever you want, wherever you are*

In addition to the industry's most advanced auto-optimization and diagnostic functions, ICP-MS MassHunter lets you remotely check instrument status and run progress, and control key processes using your smartphone or tablet.



### Increase the quality and speed of your data review

MassHunter's batch-at-a-glance data table gives you a customizable overview of the current batch — including counts, concentrations, RSD, and replicate data. Other functions of the interactive data table include:

- Comprehensive real-time results, updated during sequencing
- Interactive calibration plot display (12 plots or single plot)
- On-screen flags for outliers and QC failures
- Graphical display of internal standard recovery, QC stability plots, and mass spectrum or chromatogram



# ENHANCE THE CAPABILITY OF THE 7900 ICP-MS

## Automated sampling systems to optimize your laboratory's workflow



### Agilent I-AS Autosampler with pumped rinse station:

Ideal for ultra-trace analysis and small sample volumes (0.5 mL). Flexible rack configurations offer a maximum capacity of 89 vials, plus 3 rinse vials.



### Agilent ASX-500 Series:

A great choice for medium- and high-throughput applications, with rack configurations providing up to 360 vial positions.



### Agilent Integrated Sample Introduction System (ISIS 3):

High speed uptake pump, and close-coupled 7-port switching valve provide highest possible throughput with discrete sampling.



## Industry-leading speciation measurement

The Agilent 7900 ICP-MS links seamlessly with Agilent HPLC and GC systems through field-proven interfaces, integrated software control, documentation, and fully developed application kits. Other hyphenated techniques including CE, IC, and FFF are also easily configured.

As the leading supplier of ICP-MS and chromatography systems, Agilent can help you identify the right instrument for your application, develop methods, and train your staff. Factory-qualified engineers are also available to support your coupled systems.

## Optional accessories support a range of configurations and applications

**Nebulizer options** — including low-flow, concentric, inert (HF resistant), and parallel path — suit *your* unique sample types and volumes.

**Inert sample introduction kit** is O-ring free, and manufactured from PFA for low contamination levels. HF resistant and suitable for high-purity reagents.

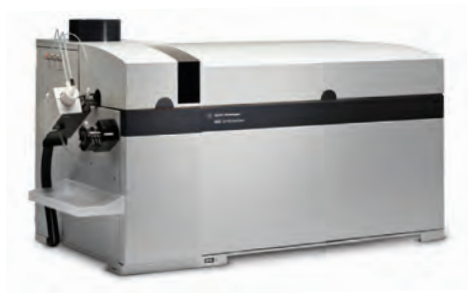
**Organics kit** contains the sample introduction parts you need to run volatile organic solvents.

**Laser ablation** enables direct sample analysis for bulk and time-resolved applications.

### Software control

Virtually unlimited possibilities for optional accessories are now available via Agilent's new open-source Software Developers Kit (SDK).





Agilent 8800 Triple Quadrupole ICP-MS

## Leading the way in atomic spectroscopy innovation

- **Agilent's 8800 Triple Quadrupole ICP-MS** transforms ICP-MS technology, providing applications capabilities and research opportunities never possible before.
- **Agilent's 700 Series ICP-OES** is the world's most productive high performance simultaneous ICP-OES.
- The revolutionary **Agilent 4200 MP-AES** runs on air for lowest cost of ownership and improved safety.
- **Agilent's AA range** includes the world's fastest flame AA and the world's most sensitive furnace AA.

Learn more about Agilent's atomic spectroscopy portfolio at [www.agilent.com/chem/atomic](http://www.agilent.com/chem/atomic)

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## Services let you focus on what you do best

Whether you need support for a single instrument or multiple labs, Agilent can help you solve problems quickly, increase uptime, and optimize your resources with:

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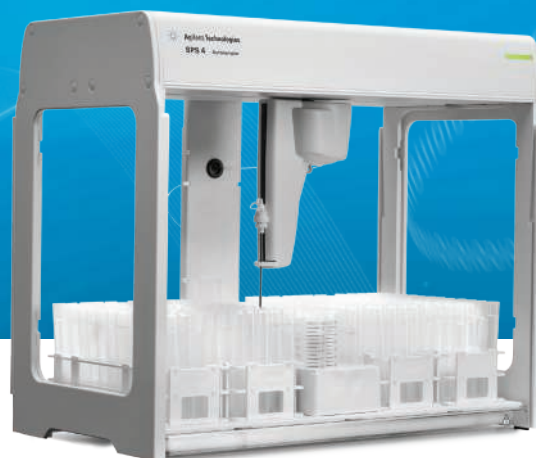
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5991-3719EN



**Agilent Technologies**

# AGILENT SPS 4 AUTOSAMPLER

## INNOVATIVE. ROBUST. PRODUCTIVE.



### PROMISING 10 YEARS OF VALUE



From the date you purchase the Agilent SPS 4 autosampler, Agilent guarantees at least 10 years' use or residual-value credit towards a replacement model upgrade. Our Value Promise maximizes your return-on-investment by ensuring that your purchase is safe.

### Introduction

The SPS 4 is a next-generation, high-performance autosampler for atomic spectroscopy applications. Designed to meet the needs of high-throughput laboratories requiring a fast, high-capacity (up to 360 samples or 768 microtiter wells), reliable autosampler, it is also small, quiet, easy-to-use and affordable. The SPS 4 is suitable for ultra-trace analysis by ICP-MS and rugged and robust enough for FAAS, MP-AES, and ICP-OES users.

Built around an innovative gantry design that supports the mechanical components between two rigid pillars, the SPS 4 provides improved accuracy and precision, high speed, ease of access, and corrosion resistance — all within a footprint that is nearly 40% smaller than other autosamplers in its class.

With the integrated environmental enclosure (optional), the SPS 4 offers maximum sample integrity while protecting your laboratory environment from hazardous sample vapors, all without compromising a millimeter of valuable bench space. In addition, access to the power switch, peristaltic pump, and all electrical and communications ports are outside the environmental enclosure for easy access and protection from corrosion.



## Uniquely Agilent in design and compatibility

- Heavy-duty, powder-coated aluminum frame for light weight, maximum rigidity and corrosion resistance.
- User programmable high-speed probe arm assembly and optimized movement for fastest sample-to-sample speed.
- USB plug-and-play connectivity allows fast and easy setup.
- Integrated spill tray contains accidental spills, protecting the laboratory bench and simplifying cleanup.
- Standards rack and rinse port are centrally located for the fastest access and maximum throughput.
- All electronic and mechanical components are located in top gantry, away from liquid spills, for long life and easy maintenance.
- Compatible with Agilent's full range of atomic spectroscopy instruments.
- Modern industrial design combines well thought out robustness and performance characteristics with a sleek, eye-catching profile that coordinates with Agilent's newest MP-AES, ICP-OES and ICP-MS designs.

## Flexible rack configuration enables wide range of sample capacities

- Compatible with a wide range of commercially available (Bel-Art) metal-free sample racks, including 90-, 60-, 40-, 24-, and 21-position racks. A 96-well microtiter plate rack is also available for ICP-MS.

Rack capacity (# tubes)	Tube OD (mm)	Maximum tube height (mm)
90	13	150
60	17	150
40	20	150
24	25	150
21	30	150

- Rack configuration is user selectable, and rack sizes can be mixed and matched as needed.
- Central standards rack is configurable to support either a 34 position (twelve 29 mm OD tubes plus twenty two 17 mm OD tubes) or 5 position (five 61 mm OD bottles) rack (depending on instrument configuration).
- Four sample rack capacity supports up to 360 samples, permitting long unattended runs in high-throughput labs.
- Eight 96-well microtiter plate capacity, with optional well plate kit, supports up to 768 samples (for ICP-MS only).

## Leading the way in atomic spectroscopy innovation

The SPS 4 is compatible with Agilent's comprehensive atomic spectroscopy portfolio.



Agilent SPS 4



Agilent AA



Agilent MP-AES



Agilent ICP-OES



Agilent ICP-MS



Agilent ICP-QQQ



### **Integrated environmental enclosure option protects your samples and your laboratory environment**

- Maintain maximum sample integrity by protecting samples from the lab environment.
- Protect operators and laboratory instrumentation from corrosive sample vapors.
- Fully integrated environmental enclosure takes up no extra valuable bench space.
- When the environmental enclosure is fitted, sample visibility remains unrestricted, as well as sample access from the front when the door is in the raised position.
- Vertically sliding front access door can be fixed open for easy access to samples.
- Electrical and plumbing connections remain outside the environmental enclosure for easy access with the cover in place.
- Environmental Enclosure Kit includes a 50 mm (2 in) extraction air duct fitting that can be fitted to either side of the autosampler as needed.

### **Dual-wash reservoir option eliminates potential carryover**

- Optional dual-port wash reservoir for ultra-trace applications or applications requiring two different rinse chemistries.

### **Three-channel peristaltic pump for ultimate flow-through rinse flexibility**

- Simultaneously pump two different rinse solutions (in conjunction with the optional dual wash reservoir)
- Third channel still allows for a pumped drain when a gravity drain is not an option.

### **Multiple probe size options for a diverse range of applications**

- A range of carbon fiber–reinforced fluoropolymer probes suit all applications from microvolume sampling to high-speed discrete sampling.
- Integrated nebulizer/probe assembly option for ultra-clean applications.
- Programmable probe speed in 3 axes for the ultimate performance with all sample types.
- Intelligent probe acceleration and deceleration permits high speed while minimizing spattering.
- Programmable probe depth for sedimentary or separated layer samples.



SPS 4 autosampler shown with optional integrated environmental enclosure. Front cover shown in fixed open position for easy access to samples.

## Specifications

Dimensions: Width 600 mm (23.6 in), Depth 320 mm (12.6 in),  
Depth 363 mm including peristaltic pump (14.3 in), Height 510 mm  
(20.1 in)

Weight: 15 kg (33.1 lbs)

Probe arm speed: User programmable in X, Z, and Theta (rotational)  
dimensions. Optimized sample-to-sample probe movement time for  
corner-to-corner travel in less than 3 seconds.

Axis	Minimum speed	Maximum speed
X (mm/sec)	14.5	1016
Z (mm/sec)	8.6	518
Theta (degrees/sec)	9	540

Rinse port flow rate: Programmable, up to 50 mL/min depending  
on pump tube diameter.

Communication: USB 2.0 (full speed) virtual com port with  
plug-and-play capability.

AUX interface: RS485 for future upgradability to external device  
control.

Power requirements: 100–240 VAC, 47–63 Hz, 1.5 A

Built-in diagnostics: The SPS 4 includes a row of four LEDs on the  
front panel that indicate the operational or error status of the  
instrument.

### Supported instruments:

AA <sup>a</sup>	MP-AES <sup>b</sup>	ICP-OES <sup>c</sup>	ICP-MS <sup>d</sup>
55B (computer controlled)	4100	5100	7700
240FS	4200		7800
280FS			7900
			8800
a. Requires SpectrAA software version 5.3 or above.	b. Requires MP Expert software version 1.5.1 or above.	c. Requires ICP Expert software version 7.1 or above.	d. Requires ICP-MS MassHunter software version 4.2 or above.



### Genuine Agilent supplies for flexible sample handling and maximum productivity

Agilent supplies for the SPS 4 autosampler are designed to give  
flexibility in sample handling and maintain the high performance  
of your system. With a wide range of sample racks and vessels  
supporting small or large sample volumes, probe options  
and interface supplies, we can help keep your lab running at  
maximum productivity.

Learn more: [www.agilent.com/chem/AtomicSupplies](http://www.agilent.com/chem/AtomicSupplies)

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Contact your local Agilent representative  
or visit:  
**[www.agilent.com/chem/atomic](http://www.agilent.com/chem/atomic)**

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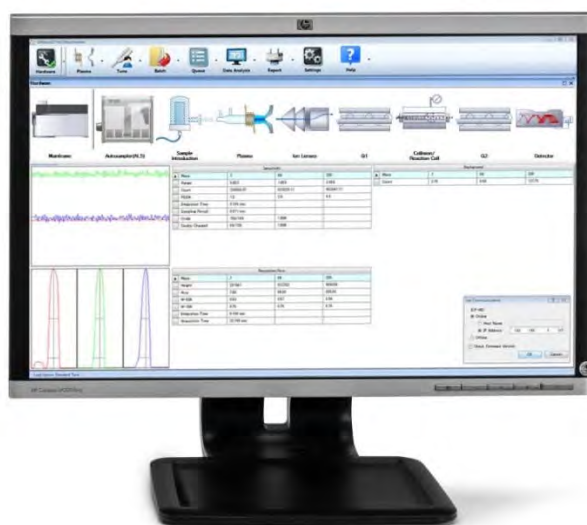
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Published May 19, 2015  
5991-5730EN





## Specifications

ICP-MS MassHunter 4.3 Software for the Agilent 7700, 7800 & 7900 ICP-MS, & 8800 & 8900 ICP-QQQ Systems



ICP-MS MassHunter 4.3 is the latest version of Agilent's simple, intuitive and powerful ICP-MS Workstation software. MassHunter 4.3 supports the 8900 triple quadrupole ICP-MS (ICP-QQQ) and is compatible with the 7700, 7800, and 7900 quadrupole ICP-MS and 8800 ICP-QQQ instruments. In addition to usability enhancements, MassHunter 4.3 has significant new functionality, including enhancements to the Method Wizard and Single Nanoparticle Application Module, and support for a wider range of third party peripherals. MassHunter 4.3 controls configuration, method setup, data acquisition, data processing and reporting for all currently supported ICP-MS systems.

ICP-MS MassHunter 4.3 runs on the Windows 7 or Windows 10 Pro or Enterprise Edition operating systems (64 bit only).

ICP-MS MassHunter 4.3 consists of a base configuration and one of five MassHunter software options (#001, #002, #003, #004 or #005), depending on which mainframe is supported (7700, 8800, 7900, 7800 or 8900, respectively).



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In addition to the core software which is specific to the ICP-MS mainframe (as determined by the option number selected), advanced functions including the Single Nanoparticle Application Module, Intelligent Sequencing, Chromatographic Data Analysis, and User Access Control Pack are available as options. Support for advanced functions available on the 7900 such as "Advanced Acquisition - option #102" and "UHMI - option #101" is included when those hardware options are purchased.

The new ICP-MS MassHunter 4.3 maintains and enhances the power and functionality of the previous version, while retaining the simple, intuitive user interface and workflows. Both Top Level and Data Analysis utilize intuitive, easy to read "Gadgets," arranged in the order in which they are commonly accessed, and with related functions combined into a single access point. Important, but less frequently used functions are organized together under the "Settings" gadget (see below).



### ICP-MS MassHunter 4.3 compatibility

- Operates on Windows 7 Pro or Enterprise Edition or Windows 10 Pro or Enterprise Edition. It requires 64 bit versions.
- Supports all current ICP-MS and ICP-QQQ mainframes and peripherals including the 7700, 7800 and 7900 ICP-MS and 8800 and 8900 ICP-QQQ. Supported autosamplers include the Agilent SPS 4, ASX-520 and I-AS autosamplers and the Cetac ASX-110 and EXR/XLR 8 autosamplers
- Many additional third party samplers and accessories are supported via plug-ins developed by the third party supplier. Contact Agilent for details
- Supports full integration of Agilent 7890 GC and 7693 autosampler
- Supports full integration of most Agilent 1100 and 1200 Series HPLC modules and peripherals

## New features of version 4.3

- Optional Single Nanoparticle Application Module (G5714A) automates setup of method and batch for data acquisition and analysis of nanoparticles, both in single particle mode and field flow fractionation mode. In single particle mode, the algorithm to determine the background has been enhanced, detection of small particles has been made more accurate, and the capability to determine and report two elements or isotopes has been improved. The Single Nanoparticle Application Module is compatible with all supported ICP-MS mainframes. On the 7900 and 8900, 100 microsecond dwell time acquisition with no settling time is available for single isotope determinations
- The unique Method Wizard has been enhanced, providing better optimization and faster analysis times in "Speed" mode, and now including availability of a method automation report
- Reporting functionality has been extended, with a more intuitive report designer in Agilent's Common Reporting Engine (CRE), support for Excel templates, and support for Excel 2016
- Upgraded functionality for LC-ICP-MS users including support for the 1260 and 1290 Infinity Multi-sampler (G7167A/B)
- New for ICP-MS MassHunter 4.3, Intelligent Sequencing is now compatible with the 8800 and 8900 ICP-QQQ systems, as well as the 7700, 7800 and 7900 ICP-MS instruments
- "Demo Mode" permits simulation of a fully functional online instrument for training and troubleshooting purposes

## ICP-MS MassHunter functions

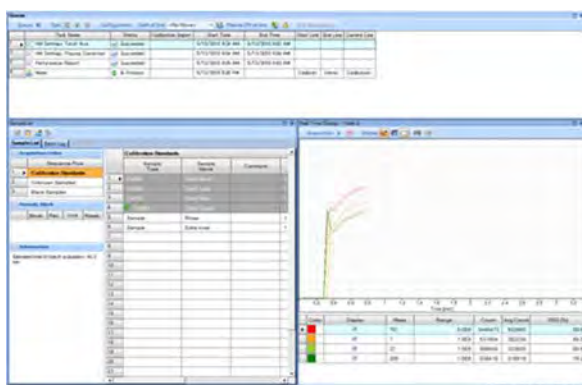
### Instrument Control, Startup and Optimization

- MassHunter 4.3 provides full control of the 7700, 7800, 7900, 8800 and 8900 ICP-MS instruments, including automated Startup and optimization procedures, and automated, unattended system shutdown at the end of a sequence
- Startup provides a user-configured schedule of system optimization and performance checks to be run under consistent conditions following plasma ignition

- Startup is particularly useful in busy commercial laboratories, as it ensures that instrument performance is checked and recorded under uniform conditions from day to day, and between different operators. A "history view" allows simple monitoring of variations in instrument performance and tuning parameters over time
- Fast and reproducible auto-tuning with tune status and current signal display
- Easy setup and configuration of mainframe options and connected peripherals
- Comprehensive diagnostic and Early Maintenance Feedback (EMF) tools

## Batch and Queue

- The Batch contains all the information and settings (sample introduction/peripump program, tune modes and settings, acquisition masses and integration times, internal standards, sample list, calibration parameters and QC settings) required to setup and run a sample batch
- Batches can be created from a blank template, a Pre-set Method or an existing batch, or by using the Method Wizard. Customized batches can be saved as Templates making it easy to reuse settings for future batches
- The Queue is the schedule of tasks assigned to the instrument for automated, sequential execution
- Queue manages all hardware and acquisition tasks including Startup and optimization, batch analysis and automated shutdown
- The real-time display indicates current sequence status, and a configurable "Monitor" function (shown below) displays the signals for user-selected masses between sample acquisitions



## Data Acquisition

- Perform pre-defined analysis using settings defined in the Batch/tune conditions, including multi-level aerosol dilution with HMI or UHMI
- Advanced rinse programs including Pre-emptive Rinse and Intelligent Rinse
- Quick Scan for fast screening analysis, integrated in the main acquisition and data analysis pane
- Spectrum, Isotope Ratio, Time Program, Time Resolved Analysis (TRA) and Fast TRA Analysis
- Time resolved acquisition includes support for continuous runs of more than 24 hours for laser imaging
- Integrated instrument and run control for Agilent 7890GC and common 1200 Series LC modules

## Data Analysis and Reporting

- ICP-MS MassHunter uses a flexible, interactive Data Batch table that is updated in real-time during sequence analysis. The Data Batch table displays all results (counts, concentration, SD, etc.) for a batch of samples (shown below)

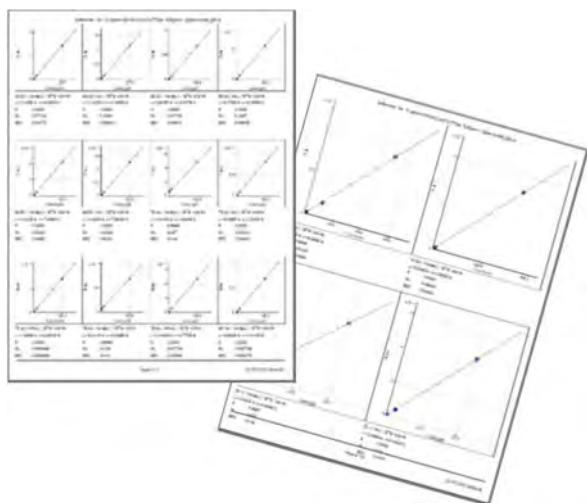


- The Batch view shows analyte results, internal standard recoveries, spectra or chromatograms, QC charts and calibration information for an entire batch or selected samples in a single view
- Outlier flags and LabQC functions are provided, and the screen layout can be switched between built-in and customized views
- Calibration modes include
  - External calibration\*
  - Method of standard additions
  - Semi-quantitative calibration
  - Isotope ratio (optional for 7800 and 7900)
  - Isotope dilution (optional for 7800 and 7900)



\*Calibration curve fit options include linear, linear through zero, linear through the blank, weighted least squares, log and second order

- A range of configurable calibration reports is provided (illustrated below)



- Data analysis view is consistent for spectrum data, and optional chromatographic and nanoparticle data analysis modules
- Recalibrations performed during the sequence are applied automatically to the subsequent samples, including converting standard addition to external calibration, isotope ratio mass bias correction, and semi-quantitative calibration update
- Up to 5 user-definable LabQC sample types, plus spike and reference samples; includes plotting and user defined action on QC failure
- Advanced tools for spectral and semi-quantitative analysis, including potential interference flags, spectral overlay and automated isotopic template update
- Isotope ratio/isotope dilution analysis (optional with advanced acquisition software on 7800 and 7900)
- The data (entire table or selected samples) may be reported directly to print/file, or quickly and easily exported to Excel 2013/2016 for advanced data analysis, further processing or transfer to custom 3<sup>rd</sup> party software
- A built-in, user-configurable LIMS export tool permits simple export of selected data to LIMS
- Compatible with OpenLAB ECM or SDA for regulatory compliance in pharmaceutical labs

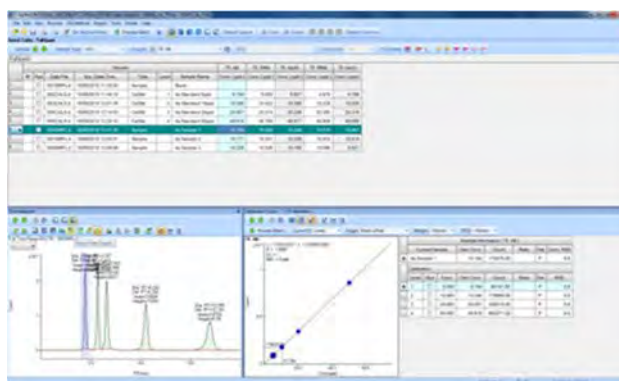
## Optional Software Modules

### Chromatographic Analysis software

ICP-MS MassHunter's optional chromatographic software module (G7205C) provides fully-functioned, integrated control for Agilent LC- and GC-ICP-MS systems, and comprehensive chromatographic data analysis with advanced integration tools.

A new parameter-less integrator (Agile2 integrator) automatically adjusts to peak widths, shapes, and baseline noise to correctly integrate practically any chromatographic peak with virtually no user input.

The chromatographic data analysis pane is analogous to the spectrum data analysis pane and includes the current chromatogram display, quantitative results, outlier functions and calibration information.



Advanced chromatographic functions include:

- Chromatographic and spectrum based internal standard correction
- Peak auto integration using global or user-selectable integration parameters per peak
- Interactive manual integration
- Snapshot data analysis of current sample during acquisition run-time
- Compound-independent calibration (CIC)
- Signal to Noise calculation
- Automatic retention time updates

### Intelligent Sequencing Real-time QC software

The main ICP-MS MassHunter software suite includes many QC functions, including Tune Checks, Intelligent Rinse, Outlier flags, LabQC samples and options for simple run-time actions on QC failure.



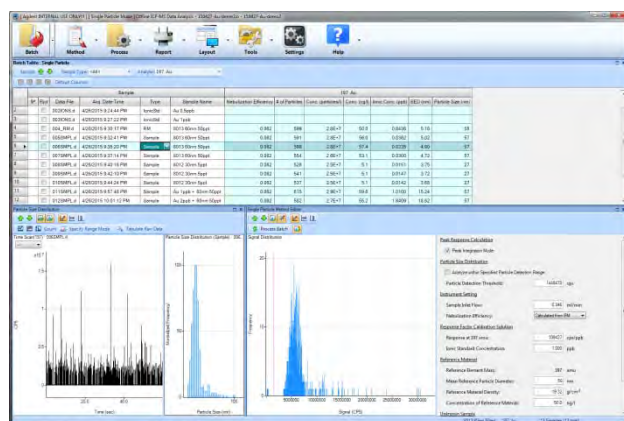
For advanced QC requirements (such as full compliance with USEPA methodology), the optional Intelligent Sequencing software module (G7206C) provides full QC configuration and reporting tools.

Intelligent Sequencing tools include the capability for multi-level QC checks and actions on failure, and support for a large number of user configurable sample types with customizable report templates. Now also available for the 8800 and 8900 ICP-QQQ systems.

## Single Nanoparticle Application Module

The optional Single Nanoparticle Application Module (G5714A) fully automates the task of setting up an analysis batch for nanoparticle determination, either in single particle mode or in field flow fractionation (FFF) mode.

The Single Nanoparticle Application Module is built into the easy-to-use Method Wizard, so creating a nanoparticle method is fast and intuitive. Acquisition parameters optimized for either single particle mode or FFF mode are automatically set up with a few mouse clicks. Sample flow, nebulization efficiency, ionic response factor and particle detection threshold are automatically calculated.



Results are displayed both in tabular format in the Batch-at-a Glance view, and graphically, including particle number, particle concentration, size distribution, median size, ionic concentration, and Background Equivalent Diameter. Powerful interactive data review and optimization tools simplify validation of results, and an entire batch of samples takes just seconds to process.

## User Access Control software for 21 CFR Part 11 Compliance

The optional User Access Control module (G7207C) provides flexible, configurable, multi-level user access control, to limit access to ICP-MS MassHunter and individual functions within the software. Actions can be set to be permitted only for certain user levels and, for each action, the requirement for the user to enter a valid username/password combination and reason can be set.

In combination with Agilent's OpenLAB ECM or SDA software, the User Access Control option for ICP-MS MassHunter can provide a solution that satisfies all the regulatory requirements of the US FDA's 21 CFR Part 11 and equivalent regulations in other countries and regions. The comprehensive range of Agilent compliance software options cover user needs from single workstation (SDA) through to multi-instrument, multi-site, global enterprise level operations (ECM).

# ICP-MS MassHunter 4.3 Workstation Compatibility

## Auto samplers

All supported ICP-MS and ICP-QQQ mainframes are compatible with the following optional autosamplers:

- SPS 4
- I-AS
- ASX-520
- ASX-110
- EXR/XLR-8

The ISIS 2 autosampler is compatible with the 7700 and 8800 instruments only. The ISIS 3 autosampler is compatible with the 7900, 7800 and 8900 instruments only.

## Operating system components

MassHunter 4.3 is compatible with:

- Windows 7 (Pro and Enterprise Editions, 64 bit, SP1), or
- Windows 10 (Pro and Enterprise Editions, 64 bit)
- Internet Explorer 9.0 or later
- Excel 2013 or 2016 (32 bit only)

## Optional software modules

The following optional software modules for ICP-MS MassHunter 4.3 are compatible with all supported ICP-MS and ICP-QQQ mainframes:

- Chromatographic Analysis
- Intelligent Sequencing
- Single Nanoparticle Application
- User Access Control

	7700 Series <sup>1</sup> & 8800	7900	7800	8900
<b>Software Functions</b>				
<b>Method Wizard (interactive mode)</b>	Yes	Yes	Yes	Yes
<b>Method Wizard (automatic mode)</b>	No	x-lens only	No	No
<b>Time Resolved Analysis (TRA) mode</b>	Yes	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes
<b>Fast TRA mode (0.1 msec. minimum dwell time)</b>	No (3 msec.)	Yes <sup>2</sup>	No (3 msec.)	Yes
<b>Isotope Ratio/Isotope Dilution</b>	Yes	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes
<b>High-Resolution/Half-Mass Mode (for correction of 2+ interferences)</b>	Yes	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes
<b>Quick Scan</b>	Yes	Yes	Yes	Yes
<b>High Matrix Introduction function (HMI)</b>	Yes	No	Yes	No
<b>Ultra High Matrix Introduction (UHMI)</b>	No	Yes <sup>3</sup> (x-lens only)	No	Yes <sup>4</sup> (x-lens only)

<sup>1</sup> 7700e requires an upgrade to enable the functionality of C.01.03 which is equivalent to upgrading first to the "full" version of B.01.xx, then to C.01.03.

<sup>2</sup> with option #102

<sup>3</sup> with option #101

<sup>4</sup> not with option #200

	<b>7700 Series<sup>1</sup> &amp; 8800</b>	<b>7900</b>	<b>7800</b>	<b>8900</b>
<b>Fast Cell Gas Switching</b>	No	Yes	Yes	Yes
<b>Autotune</b>	Yes	Yes	Yes	Yes
<b>Flexible Manual Tuning</b>	Yes	Yes	Yes	Yes
<b>Spray Chamber Temperature Control (selectable -5 °C to 20 °C)</b>	Yes	Yes	Yes	Yes
<b>H<sub>2</sub> Cell Gas control</b>	Optional for 7700 Included for 8800	Optional	Optional	Included
<b>Link to OpenLAB ECM or SDA for full compliance with 21 CFR Part 11</b>	Yes	Yes	Yes	Yes
	(requires User Access Control software option G7207C)			
<b>eFamiliarization (Tutorial video) (Audio: English, Chinese, Japanese Subtitle: French, Italian, German, Spanish, Portuguese, Korean)</b>	No	Yes	Yes	Yes
<b>Remote Advisor (Level A)</b>	Yes	Yes	Yes	Yes

Supported Agilent LC and GC Modules – Full integration and control of LC and GC modules from within ICP-MS MassHunter

<b>Agilent LC Module</b>	<b>Part Number</b>
<b>1200 Isocratic Pump</b>	G1310A
<b>1260 Isocratic Pump</b>	G1310B
<b>1200 Binary Pump</b>	G1312A
<b>1260 Binary Pump SL</b>	G1312B
<b>Solvent Selection Valve</b>	G1312B, #031
<b>1260 Binary Pump VL</b>	G1312C
<b>1290 Binary Pump</b>	G4220A
<b>1290 Binary Pump VL</b>	G4220B
<b>1260 Infinity SFC Binary Pump</b>	G4302A
<b>1100 Quaternary Pump</b>	G1311A
<b>1260 Quaternary Pump</b>	G1311B
<b>1260 Quaternary Pump VL</b>	G1311C
<b>1290 Infinity Quaternary Pump</b>	G4204A
<b>1260 Infinity Bio-inert, Ti Head, Fe-Free Quaternary Pump VL</b>	G5611A
<b>1100 Standard ALS</b>	G1313A
<b>1200 Standard ALS</b>	G1329A


<b>1260 Standard ALS SL</b>	G1329B
<b>1260 SFC Standard ALS</b>	G4303A
<b>1260 Infinity II Vialsampler</b>	G7129A
<b>Integrated Column Compartment</b>	G7130A
<b>1100 Well-Plate ALS</b>	G1367A
<b>1200 High Performance ALS</b>	G1367B
<b>1200 High Performance ALS SL</b>	G1367C
<b>1200 High Performance ALS SL Plus</b>	G1367D
<b>1260 Infinity High performance ALS SL</b>	G1367E
<b>1290 Infinity ALS</b>	G4226A
<b>Bio-Inert LC metal-free ALS</b>	G5667A
<b>1290 Infinity Thermostat</b>	G1330B
<b>1260 Infinity Multisampler</b>	G7167A
<b>1290 Infinity II Multisampler</b>	G7167B
<b>1260 Low Flow High Performance Sampler</b>	G1377A
<b>1260 Cap-LC Pump</b>	G1376A
<b>1260 Nano-LC Pump</b>	G2226A
<b>1260 Low Flow Sampler</b>	G1389A
<b>1290 Infinity Thermostatted Column Compartment</b>	G1316A
<b>1290 Infinity Thermostatted Column Compartment SL</b>	G1316B
<b>1290 Infinity Thermostatted Column Compartment SL Plus</b>	G1316C
<b>1260 Infinity Micro Degasser (no software control)</b>	G1379B

<b>Agilent GC Module<sup>5</sup></b>	<b>Part Number</b>
<b>7890A GC system</b>	G3440A
<b>7890B GC system</b>	G3440B
<b>7693B Auto injector module</b>	G4513A
<b>7693 Auto sampler tray module</b>	G4514A

<sup>5</sup> Note that GC Firmware must be version A.01.11.1 or later for direct support from ICP-MS MassHunter

## Ordering information

### MassHunter 4.3 Workstation PC Bundle for the Agilent 7700, 7800 and 7900 ICP-MS, and 8800 and 8900 ICP-QQQ systems<sup>6</sup>

Part Number	Description	
G7215C	Agilent MassHunter-Ready Workstation for 7700, 7800 and 7900 ICP-MS, and 8800 and 8900 ICP-QQQ systems	
Agilent’s ICP-MS MassHunter-ready workstation includes a PC (one of the models listed below), monitor, printer, Windows 7 Pro (64 bit version), Excel 2013 (32 bit) and manuals. Does not include ICP-MS MassHunter software (select the appropriate software module from those listed below)		
Hardware-specific ICP-MS MassHunter software modules:		
G7215C, #001	ICP-MS MassHunter G7201C for the 7700x/s ICP-MS	
G7215C, #002	ICP-MS MassHunter G7201C for the 8800 ICP-QQQ	
G7215C, #003	ICP-MS MassHunter G7201C for the 7900 ICP-MS	
G7215C #004	ICP-MS MassHunter G7201C for the 7800 ICP-MS	
G7215C #005	ICP-MS MassHunter G7201C for the 8900 ICP-QQQ	
PC specifications	MassHunter is tested and supported on the models listed below, or on models shipped later.	
	HP Z230 (Small Form Factor)	
Processor Type	Intel® Xeon® E3-1225v3 8MB cache, 4C (Quad-core)	
Processor Speed	3.2 GHz	
RAM	HP 4GB (1x4GB) DDR3-1600 non-ECC RAM	
Hard Disk	500 GB SATA, 6Gb/s, 7200rpm	
Optical Drives	HP 16x SuperMulti DVD+/-RW SATA Drive	
Graphics	Integrated Intel HD Graphics P4600	
Audio	Integrated High Definition Realtek ALC221 Audio	
Accessories	Keyboard and Optical Mouse	
Ports	LAN* port – Integrated Intel I217LM Gigabit Network Interface Additional RS232 Serial Port (2 in total)	

<sup>6</sup> Subject to change without notice

	<b>HP Z220 (Small Form Factor)</b>	
Processor Type	Intel® Xeon® E3-1225v2 8MB cache, 4C (Quad-core)	
Processor Speed	3.2 GHz	
RAM	4 GB (2 x 2GB) DDR3-1600 non-ECC RAM	
Hard Disk	250 GB SATA, 6Gb/s, 7200rpm	
Optical Drives	HP 16x SuperMulti DVD+/-RW SATA Drive	
Graphics	Integrated Intel HD Graphics P4000	
Audio	Integrated High Definition Realtek ALC221 Audio	
Accessories	Keyboard and Optical Mouse	
Ports	LAN port – Integrated Intel 82579LM Gigabit Network Interface Additional RS232 Serial Port (2 in total)	
<b>Operating System</b>	<b>Windows 7 Professional, 64 bit, SP1 (English/Japanese/Chinese)</b>	
Monitor	HP Z221 21.5" widescreen LCD	
Laser Printer	(English/Chinese) HP LaserJet P3015dn (600 sheets tray capacity / 35ppm) (Japanese) Canon LBP-6330	

#### NOTE

The ICP-MS is connected to the instrument control PC using the standard LAN port of the PC. If a second LAN connection is required, for example to connect the PC to a building LAN or to control an Agilent LC or GC system, a LAN switch (switching hub) such as the HP ProCurve Network Switch (G2402A) is recommended. It is possible to use a second LAN card, but communication problems have been reported with this configuration, so the preferred and supported configuration is with a network switch.



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## Current PC Specifications for ICP-MS MassHunter Workstation

Note: subject to change without notice

### PC

<b>Model</b>	<b>HP Z240 Small Form Factor Workstation</b>
<b>Operating System</b>	<b>Windows 7 Professional, 64bit, SP1 (English/Japanese/Chinese)</b>
<b>Processor</b>	Intel® Xeon® E3-1225v5 (3.3 GHz, 8MB cache, 4 cores)
<b>Memory</b>	4 GB (DDR4)
<b>Hard Disk</b>	500 GB 7200 rpm SATA
<b>Optical Drive</b>	HP DVD-RW SuperMulti Drive
<b>Graphics</b>	Intel HD Graphics P530
<b>Audio</b>	Integrated Realtek HD ALC221
<b>Ports</b>	8x USB 3.0 (2 in front, 6 rear) 2x USB 2.0 (2 in front) RS232 Serial Port (2 in total)
<b>Input Devices</b>	Keyboard, Optical Scroll Mouse
<b>Dimensions (W x D x H)</b>	100 x 381 x 338 mm (3.95 x 15.0 x 13.3)
<b>Weight</b>	6.7 kg (12.66 lbs)

Note: The ICP-MS is connected to the instrument control PC using the standard LAN port of the PC. If a second LAN connection is required, for example to connect the PC to a building LAN or to control an Agilent LC or GC system, a LAN switch (switching hub) such as the HP ProCurve Network Switch (G2402A) is recommended. When using a second LAN card, communication problems are commonly reported with this configuration, so the preferred and supported configuration is with a network switch.



## Monitor

Model	HP EliteDisplay E222 21.5-inch IPS Monitor
Display size	21.5", Wide screen (16:9)
Dimensions (W x D x H) (with stand)	514 x 189 x 334 mm (20.22 x 7.44 x 13.13 in)
Weight (with stand)	5.27 kg (11.62 lb)



## Printer

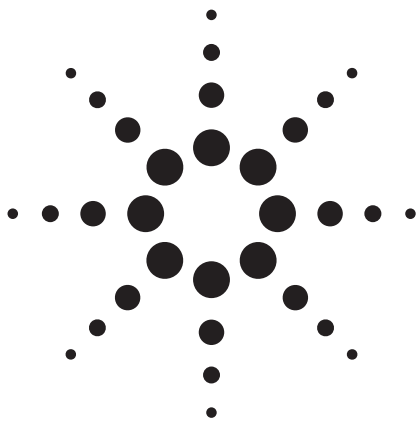
### English / Chinese

Model	HP LaserJet Enterprise M506dn
Dimensions (W x D x H)	418 x 376 x 298 mm (16.46 x 14.80 x 11.73 in)
Weight	11.8 kg (25.9 lbs)

### Japanese

Model	Canon LBP251
Dimensions (W x D x H)	400 × 377 × 298 mm
Weight	11.5kg





## **Agilent Technologies, Inc. – Support Services: Repair Service/Extended Warranty, Agilent CrossLab Service Plans**

Exhibit 22X

Agilent  
**CrossLab**

Agilent Technologies' Repair Service/Extended Warranty and Agilent CrossLab Service Plans are governed by this Exhibit and the Agilent Service Terms (E16S).

### **Repair Service/Extended Warranty, and Agilent CrossLab Service Plans**

Repair Service/Extended Warranty, and Agilent CrossLab Service Plans include defined combinations of Agilent services, which Customers may not substitute. The following service bundles are available from Agilent, on supported products:

**Repair Service/Extended Warranty (R-28D).** Repair Service/Extended Warranty provides warranty-level service coverage on supported instruments. Services include: Telephone Support to Isolate and Resolve Hardware Problems, and On-site Hardware Troubleshooting and Repair with Standard Response time according to the defined warranty repair strategy for the specific hardware system or module. All labor, travel costs, and repair service parts are included.

**Agilent CrossLab Bronze (R-28C).** Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems and On-site Hardware Troubleshooting and Repair with Standard Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair are included. Upon availability, the Agilent Remote Advisor service is also included.

**Agilent CrossLab Bronze - Government/Academia (R-29C).** The Agilent CrossLab Bronze – Government/ Academia service plan is only available to Government and Academia customers. Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems and On-site Hardware Troubleshooting and Repair with No Guaranteed Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair are included. Upon availability, the Agilent Remote Advisor-Assist service is also included. Agilent reserves the right to substitute Service Center Repair for On-site service as deemed necessary.

**Agilent CrossLab Silver (R-28R).** Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, Service Center Repair\* and On-site Hardware Troubleshooting and Repair with Standard Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair, are included. Additionally included are one Agilent CrossLab Preventive Maintenance, and upon availability, Agilent Remote Advisor is also included.

**Agilent CrossLab Silver Plus (R-38R).** This service is available for select Agilent LCs and includes the Deuterium Lamp Replacement benefit. Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, Service Center Repair\* and On-site Hardware Troubleshooting and Repair with Standard Response time. All labor, travel costs, and service parts, including Consumable Parts Required for Repair, are included. Additionally included are one Preventive Maintenance visit including the replacement of the Deuterium lamp, and upon availability: Agilent Remote Advisor is also included.



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**Agilent CrossLab Silver with OQ (R-28S, R-28U).** Services include: services defined in the Agilent CrossLab Silver (R-28R) section above and furthermore one Agilent CrossLab Operational Qualification (OQ/ PV) event which is guaranteed to pass.

**Agilent CrossLab Silver with OQ and RQ (R-28T, R-28V).** Services include: services defined in the Agilent CrossLab Silver (R-28R) above and furthermore one Agilent CrossLab Operational Qualification (OQ/PV) event which is guaranteed to pass, and Agilent CrossLab Repair Qualification (RQ) which allows for unlimited number of re-qualifications after a repair within the contract period.

**Agilent CrossLab Silver with Software (R-28W).** Services include: services defined in the Agilent CrossLab Silver (R-28R) above and furthermore workstation Software Media Updates.

**Agilent CrossLab Gold (R-18E).** Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, Service Center Repair\* and On-site Hardware Troubleshooting and Repair with Next Business Day Response time, where available. All labor, travel costs, service parts, including Consumable Parts Required for Repair are included. Additionally included are one Preventive Maintenance, and upon availability: Agilent Remote Advisor-Assist, Agilent Remote Advisor-Report, and Agilent Remote Advisor-Alert. Also included are an assigned account manager with quarterly review meetings, and an onsite cache of commonly needed parts.

**Agilent CrossLab Gold with OQ (R-18F, R-18H).** Service includes: services defined in the Agilent

CrossLab Gold (R-18E) above and furthermore one Agilent CrossLab Operational Qualification (OQ/PV) event which is guaranteed to pass.

**Agilent CrossLab Gold with OQ and RQ (R-18G, R-18J).** Services include: services defined in the Agilent CrossLab Gold (R-18E) section above and furthermore only one Agilent CrossLab Operational Qualification (OQ/PV) event which is guaranteed to pass, and Agilent CrossLab Repair Qualification (RQ) which allows for unlimited number of re-qualifications after a repair within the contract period.

**Module Repair (R-28X).** Service coverage for individual module only. Service includes: Telephone Support to Isolate and Resolve Hardware Problems, and On-site Hardware Troubleshooting and Repair with Standard Response time according to the defined warranty repair strategy for the specific hardware system or module. All labor, travel costs, and repair service parts are included.

Certain hardware components may require return to Agilent services at an Agilent Service Center Repair.

**Repair Service/Extended Warranty Mass Spec Only (R-29D).** Service includes: services defined in the Repair Service/Extended Warranty section above for the Mass Spec component of supported GCMS or LCMS systems. No service is performed on the front-end components.

**Agilent CrossLab Bronze Mass Spec Only (R-29B).** Services include: services defined in the Agilent CrossLab Bronze (R-28C) section above, for the Mass Spec component of supported GCMS or LCMS systems. No service is performed on the front-end components.

**Agilent CrossLab Repair and Maintenance – Government/Academia (R-29R).** The Agilent CrossLab Repair and Maintenance – Government/Academia Service plan is only available to Government (Country/State/Local) and Academia (College/University) customers. Service includes: Telephone Support to Isolate and Resolve Hardware and Software Problems, On-site Hardware Troubleshooting and Repair with No Guaranteed Response time. All labor and travel costs are included. Parts and Consumables required for repair are not included and must be purchased from Agilent. Only one Agilent CrossLab Preventive Maintenance is included. Upon availability: the Agilent Remote Advisor service is included.

**Agilent CrossLab Silver with Functional Verification (R-26X).** Services include: services defined in the Agilent CrossLab Silver (R-28R) section above and furthermore one Agilent CrossLab Functional Verification testing event within the contract period. Only one Agilent CrossLab Preventive Maintenance is included.

**Agilent CrossLab Gold with Functional Verification (R-16W).** Services include: services defined in the Agilent CrossLab Gold (R-18E) section above and furthermore one Agilent CrossLab Functional Verification testing event within the contract period. Only one Agilent CrossLab Preventive Maintenance is included.

Service center repair option available only for products that specify this repair method or in cases where this option is mutually beneficial to customer and Agilent.

## Service Definitions

### ***Service Definitions for All Repair Service/Extended Warranty and Agilent CrossLab Service Plans***

**Telephone Support to Isolate and Resolve Hardware and Software Problems.** Includes telephone access to Agilent for the specific purpose of isolating and resolving hardware problems. If software phone support is specified, also includes telephone access for the specific purpose of isolating and resolving software problems. Software phone support covers only the single instance of the Agilent workstation software controlling the covered instrument system. Excludes client- server database software and Informatics software. May include software support from vendors other than Agilent for Multi-Vendor Services arrangements.

**On-site Hardware Troubleshooting and Repair.** Includes diagnosis and correction of product malfunctions and failures at the Customer site. Repair is provided uninterrupted, unless Agilent determines that additional parts or resources are required. In such case, Agilent will interrupt repair services and will resume as soon as the parts or resources are available. The repair may consist of temporary procedures that Customer must follow while a permanent solution is developed.

**Modules for Service Center Repair.** Agilent systems may contain hardware modules that require Agilent service center repair. These modules are not subject to on-site support.

**Deuterium Lamp Replacement.** Agilent CrossLab Silver Plus plans include one (1) deuterium lamp during the 12 months period of the agreement. On site replacement of this lamp by an Agilent engineer will occur during

the included Preventive Maintenance (PM) visit. If the lamp does not require replacement at the time of the PM visit, the customer may contact Agilent anytime during the agreement coverage and request a lamp be shipped to them at no charge. If the lamp is not requested during the agreement period, no credit will be given or passed along to future agreements.

Agilent Labor and Travel to install the lamp outside of the PM visit is not included in the agreement.

**Consumable Parts Required for Repair.** With the exception of the lamp benefit contained in Agilent CrossLab Silver Plus, consumables and supplies required during the routine maintenance and normal operation of your instruments are not included in any Agilent CrossLab Service Plan. However certain supplies and consumable parts may be required as part of repair or the diagnosing of instrument or product problems. [www.agilent.com/chem/svccconsumables](http://www.agilent.com/chem/svccconsumables)

Unless otherwise stated, the quantity of such items included in contractual coverage is limited to the amount necessary to return the instrument to normal operation.

**Service Center Repair.** Includes diagnosis and correction of product malfunctions and failures at local Agilent Service Centers. Agilent may install engineering improvement modifications, when applicable, and perform services such as cleaning, adjusting, lubricating, inspecting or testing. Repaired products are re-tested and certified to verify proper operation. All required labor, parts and materials are included. Replaced parts become the property of Agilent.

**Agilent CrossLab Preventive Maintenance.** Includes replacement of specific parts, cleaning, adjusting, lubricating, inspecting or testing system procedures. Agilent may also perform routine operational maintenance procedures. Labor and parts required to perform Agilent's preventive maintenance procedures and travel to Customer's site once during the coverage period are included. Preventive Maintenance is performed according to Agilent-recommended procedures upon a mutually agreed schedule, or coincident with purchased instrument calibration or operational qualification service. Instrument specific maintenance procedure checklists are available from Agilent upon request.

Agilent CrossLab Silver Plus includes a deuterium lamp benefit that is provided at the time of the Preventive Maintenance Visit.

**Agilent CrossLab Operational Qualification.** Determines operational performance using a chemical test sample kit of known concentration on chromatography instruments via Agilent CrossLab Operational Qualification (OQ) procedure and methodology. The service is compatible with all Agilent instruments, and selected non-Agilent products. Service is provided annually.

**Agilent CrossLab Repair Qualification.** Uses Agilent CrossLab procedures and testing methodology to test that a system is performing to Agilent's operational specification after repair. The service is provided after repair of system components that may impact system operational performance.



**Agilent Remote Advisor-Assist.**

Enables Customer to open a service request by clicking the Push for Help icon on connected systems. The Push for Help request is acknowledged within one (1) hour and Customer receives a call back within four (4) hours from Agilent to isolate and resolve hardware issues. Additionally, enables Customer to open a secure Real-time Collaboration session with Agilent for live remote diagnostics and assistance. This feature not available for all systems. Remote Advisor features require installation; installation charges may apply.

**Agilent Remote Advisor-Report.**

Provides instrument configuration, availability and utilization reporting information for connected systems in hardcopy form or via access to secure web-based reporting portal. This feature not available for all systems. Remote Advisor features require installation; installation charges may apply.

**Agilent Remote Advisor-Alert.** Allows Customer to set text or email alerts to notify Customer when instrument maintenance thresholds are reached or when the instrument requires user interaction. This feature not available for all systems. Remote Advisor features require installation; installation charges may apply.

**Overtime Service.** Overtime is defined as support delivered outside or extending beyond normal business hours of 8:00 AM to 16:00 PM local time Monday through Friday except local holidays (may vary by country).

**Response Time.** Response time is measured in elapsed coverage days from the day the service request is received to the day Agilent arrives at Customer's site. Standard Response time varies depending on the distance from an Agilent office. The travel zone distance varies by country.

**Software Media Updates.** At Agilent's discretion, software updates and documentation may be delivered automatically to Customer's site or provided via website portals, where available. Agilent grants a license to use the updates in accordance with the software license terms associated with the underlying Software. Note: Only Agilent CrossLab Silver with Software service includes media updates.

**Service Prerequisites*****Applicable for Agilent CrossLab Service Plans:***

**Recommended Modifications, Reliability, and Performance Enhancements.** Agilent may make recommended modifications at Agilent's expense to improve instrument serviceability or reliability, to comply with legal requirements, or to enhance performance of Customer's instruments, covered by Agilent service agreements. Any such changes are made during the period of coverage according to a mutually agreed upon schedule or coincident with instrument repair.

***Applicable for Qualification Services:***

**Preventive Maintenance.** A preventive maintenance procedure when recommended by manufacturer may be performed prior to qualification services at customers expense unless otherwise covered by service agreement.

***Applicable for Software Support Services:***

**General.** Agilent provides telephone support only for software that Customer has properly licensed and that is used on instrumentation or hardware that meets Agilent specifications for that software. Support is available for current software version and for last previous version for a minimum of one (1) year from the date of last availability. Telephone support is not available for any software which has reached end-of-support. If support coverage lapses, additional fees may apply.

**Designated Callers.** Customer must identify one primary and one alternate caller, both of whom have completed appropriate Agilent training courses or have equivalent experience operating the applicable Agilent Life Sciences and Chemical Analysis instruments or Informatics Systems.

**Telephone Access.** Customer must provide a telephone near the system or at another mutually agreed location, which allows Customer to perform software operations required during problem resolution.

**Diagnostic and Maintenance Software.** Customer must allow Agilent to reside Agilent system and network diagnostic and maintenance programs on Customer's system or site for the exclusive purpose of performing diagnostic and maintenance procedures. Prior to submitting a software problem report to Agilent, Customer may be asked to assist Agilent in running such programs, which are the sole property of Agilent and Agilent may remove them when the support contract ends.

## Customer Responsibilities

### ***Customer Responsibilities for All Repair Service/Extended Warranty and Agilent CrossLab Service Plans***

#### **Operating and Maintenance**

**Procedures.** Customer must follow the operating and maintenance procedures specified in the applicable instrument documentation. These procedures include routine operational maintenance and other routine maintenance associated with the operation of an instrument. Customer shall be responsible for all service and parts required due to failure to perform these procedures.

**Access.** Customer must provide Agilent access to the instruments, adequate working space and use of all information and facilities necessary to service the instrument at Customer's site.

**Appropriate Communication Ability.** Customer must have adequate access to telephones near instruments and must be fluent in a language supported by local Agilent Call Center. Web, e-mail and fax access are required for patches and information transfer.

**Material Shipping and Receiving Capabilities.** Customer must have facilities available to ship and receive parts, including the ability to deal with static-sensitive parts and protective packaging.

**Locked Cabinet or Room (Agilent CrossLab Gold service).** Customer must provide a locked cabinet or room for the onsite parts cache. The parts remain Agilent owned until consumed by the customer. Customer will not remove parts from the cache without prior consent from Agilent.

## ***Applicable for Service Center Services:***

**Compliance with Agilent Process.** Customer must follow the standard Agilent process for calling, reporting and qualifying a hardware problem. The pertinent Instrument information must be provided.

**EHS Form.** Customer must enclose the completed Environmental Health & Safety (EHS) form, or if not available, provide a written statement that no EHS hazard exists as a result of the use of the instrument in Customer's laboratory.

**Proper Packaging.** Any returned instruments must be carefully packed in a proper shipping carton.

## ***Applicable for Mass Spectrometer Maintenance and Ion Source Cleaning Services***

**Venting.** Customer must vent the Mass Spec system prior to Preventive Maintenance and/or Ion Source Cleaning Services. Customer is also responsible for supplying and safely disposing of the necessary solvents used during the ion source cleaning.

## ***Applicable for Qualification Services:***

**Rescheduled Services.** Customer is responsible for costs incurred by Agilent as a result of postponing or rescheduling any qualification service.

**Business Decisions.** Business decisions or actions taken by Customer as a result of any qualification service procedure are responsibility of the Customer.

**Proprietary Information.** Any Agilent-copyrighted materials may not be copied unless Agilent agrees to such copying in writing.

## Service Limitations

### ***The following limitations apply to all Repair Service, and Agilent CrossLab Service Plans***

**Product Eligibility.** Unless otherwise stated, eligibility for services is limited to select Agilent and Agilent-supported non-Agilent instruments only and is subject to local availability. These Agilent products must have been purchased as 'new' products by the Customer from Agilent or a reseller authorized by Agilent to sell these products.

Coverage of Agilent products procured from sources other than those above or purchased 'used' items may be covered at Agilent's discretion. A physical and operational inspection by trained Agilent personnel will be required at Customer's expense prior to extending coverage. If contractual service is desired, the customer is responsible for Time and Materials charges prior to repair such used equipment should defects be discovered during the inspection.

Any service not covered by the contractual service ordered, including but not limited to software support, is subject to Agilent's standard service rates. The serviced system must include at least the minimum configuration or other configuration specified in the appropriate instrument documentation.

**Service Availability.** Coverage hours will be Agilent's normal business hours (08:00 am to 17:00 pm local time), Monday through Friday, excluding local holidays.

**Maximum Use Limitation.** Agilent may assess additional service charges for certain electromechanical devices based on the measured usage of the unit if a maximum usage rate is specified in the instrument data sheet or operational manual. Customer must allow Agilent to install or remove usage meters, and must provide meter readings on a periodic basis. Support for instruments used beyond the recommended level is limited to time and materials service and invoiced separately.

**Obsolete Instruments.** Agilent standard services do not cover instruments or products that are beyond their specified support period.

**End-of-Guaranteed-Support.** Service coverage under this Exhibit (including multi-year agreements) for any main analytical component such as a mainframe or subordinate components such as a detector will automatically convert to Agilent CrossLab Extended Service coverage when the component reaches its End-of-Guaranteed-Support. In cases where Agilent CrossLab Extended Service is not available, the service coverage for that main analytical component or subordinate component will cease. Price uplifts may apply. Agilent CrossLab Extended Service options are described in a separate service exhibit 22L. Agilent CrossLab Extended Service applies only to Agilent instruments.

**Contamination and Corrosion.**

Services for parts and instruments that become contaminated when operated in hazardous environments or difficult to service, including requiring more than typical parts replacement will be subject to additional charges. Customer is responsible for proper disposal of all contaminated material that cannot be returned to Agilent in a safe manner.

**Consumables, Supplies and Parts.**

Supplies or consumables for the routine maintenance or normal operation of Agilent Instruments or Products are not included.

**Application Software Support.**

Agilent provides remote support for two (2) designated callers to isolate and resolve software issues or problems with Agilent Application Software including but not limited to ChemStation, ChemStore, and EZChrom Elite Workstation series. Support for the operating system, any other software on the system, in-depth training, consulting or any custom engagements, including software customization, are not included. Response time is four (4) hours during Agilent business hours. Issues not solved remotely are handled through Agilent on-site service and subject to additional charges.

**Agilent Informatics Software**

**Support.** Support for Agilent Informatics software, including but not limited to Agilent OpenLab CDS client/server installations, Agilent OpenLAB ECM, and Agilent OpenLab ELN, is not included. Support coverage for Agilent Informatics software may be purchased separately.

**Modules for Service Center Repair.**

Agilent systems may contain hardware modules that require Agilent service center repair. These modules are not subject to on-site support.

**Software Updates.** Software updates or upgrades are not specifically provided under any Agilent CrossLab service plan. Contractual software update services may be purchased at additional charge for eligible Agilent instruments.

**Support for Agilent-Provided PC**

**Hardware and Peripherals.** Agilent Repair Service/Extended Warranty and Agilent CrossLab Service Plans cover repair of select PCs, laptops, and monitors purchased from Agilent or Agilent-authorized sources within three years of instrument purchase. Agilent reserves the right to repair or replace a non-functioning PC or monitor under coverage with a model of equal or greater specification at Agilent's discretion. Printers and other peripherals are specifically excluded from all service coverage described above.

## Cancellation or Deletion

Upon sixty (60) days prior written notice, Customer may delete Product from or cancel in its entirety a Service Agreement to which this Exhibit applies, including but not limited to, return to bench support, on-site support, response center support, application and technical. Customer will receive a refund that is prorated over the term of the Service Agreement, subject to a fee in the amount of 10% of the price of the cancelled Service or deleted Product. Customer will pay for all Service rendered under the scheduled Service Agreement.

Information regarding applicable Service charges is available upon request. A Service Agreement that contains more than one type of Service may only be cancelled in its entirety.

Customer may not cancel a portion of, or an individual Service offered under a Service Agreement.

Scheduled service agreements include preventive maintenance and operational qualification, which are sold either up-front or post-sales. If no services have been delivered, the customer is responsible to pay the agreement for 60 days after written notification of cancellation is received. If the services have been completely delivered, the customer is responsible for full payment through the end of the agreement period, or current year of a multi-year agreement. This also applies to scheduled services included as part of a contract bundle (e.g. Agilent CrossLab Silver). If the scheduled service has been completely delivered, the customer is responsible for the full price of the scheduled service portion of the agreement.

Technical information, service descriptions and entitlements in this document are subject to change without notice.

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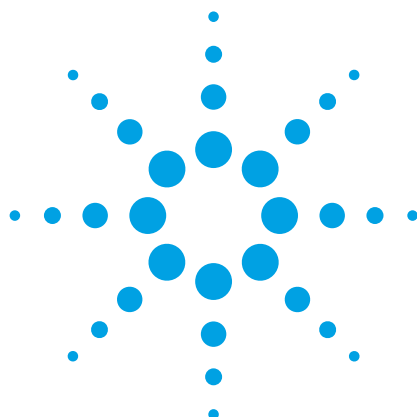
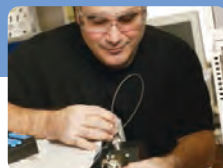
Revision 1.7



**Agilent Technologies**

# Agilent Service Guarantee

Agilent Service and Support keep your laboratory productive



With over 40 years of experience, Agilent Technologies is the world's premier measurement company and we lead the industry in providing the most reliable instrumentation and service. We are so confident in our service quality and the reliability of our instruments that we offer the Agilent Service Guarantee:

## The Agilent Service Guarantee

**Should your Agilent instrument require service while covered by an Agilent service agreement, we guarantee repair or we will replace your instrument for free.**

*No other company offers you this level of commitment to keep your laboratory operating efficiently.*





### How does the guarantee work?

When a hardware problem cannot be solved immediately, a formal escalation process ensures that key technical and management resources—including research and development, manufacturing and executive management—quickly attend to your issue. If this process does not resolve the hardware issue, we will replace your instrument for free. This escalation process exemplifies how Agilent is committed to keeping your laboratory up and running, no matter what.

### What's behind our guarantee?

Agilent is a technology leader in communications, electronics, life sciences and chemical analysis. The company's 21,000 employees serve customers in more than 110 countries.

### Why we're confident in the quality of Agilent services

Agilent Service Engineers are the most highly qualified in the industry.

- Our Service Engineers have an average of **10 years of instrument repair experience** and many are former instrument users.
- Our **training process is rigorous and continuous**, exceeding the requirements of most independent service providers and many instrument manufacturers.
- Our Service Engineers **are trained at multiple Agilent sites** around the world to gain global expertise in a wide range of situations.
- We require our Service Engineers to be **ready to support every new instrument** that goes to market.



Agilent customers worldwide report  
**98% satisfaction**  
with our Service Engineers  
(Agilent customer satisfaction survey, 2005).

### You get more than excellent service with Agilent Service Agreements

You get fast repair, typically quicker than any other manufacturer. Our world-class, factory-trained Service Engineers can quickly transform your instruments to current operating conditions. They carry a large supply of most-commonly-used parts for immediate repairs, plus they have instant access to Agilent's worldwide, world-class parts logistics centers that can send needed parts overnight.

You get:

- **Comprehensive protection** against unexpected repair costs with one fixed price.
- **Genuine Agilent parts**—designed and manufactured with the same high standard of performance and reliability as your Agilent instruments.
- **State-of-the-art resources** to diagnose, fix, upgrade and verify instrument repair.
- **Certainty in the quality of the repair**, with our industry-leading standards.
- **Confidence** in the quality of your results.

### Contact us to maximize your laboratory's productivity

To learn more about the Agilent Service Guarantee and the value you get from Agilent Service Agreements:

- Contact your local Agilent sales office or call 800-227-9770, option 1 (in the U.S. and Canada)
- Check [www.agilent.com/chem/services](http://www.agilent.com/chem/services) for details about all of our support services.

Information, descriptions and specifications in this publication are subject to change without notice

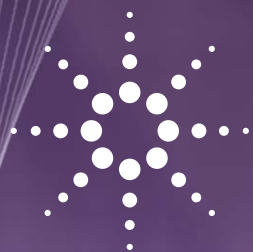
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**Agilent Technologies**





Agilent Value Promise

# OUR INSTRUMENTS LAST FOR YEARS OUR COMMITMENT LASTS FOREVER

The Measure of Confidence



Agilent Technologies

## MAXIMIZE YOUR INSTRUMENT INVESTMENT

### Plan to optimize

Through the years, you've trusted Agilent Technologies to provide the instrumentation, supplies, and support needed to keep your lab running at peak performance. As each of your instruments reach the end of its useful life and as technology applications evolve, you can continue looking to Agilent to maximize the longevity of your initial investment. Let Agilent help ensure that your lab is always running at its highest level of efficiency and productivity. Plan to optimize your assets with our timely and cost-effective transition solutions.

### Promising 10 years of value



The Agilent Value Promise reflects utmost confidence in our unrivaled industry standards for quality system design and manufacturing. From the date you purchase select instruments from our leading Agilent chromatography, spectrometry, and spectroscopy product lines, our Value Promise guarantees at least 10 years' use or residual-value credit towards a replacement model upgrade. Because we stand behind our systems, our Value Promise maximizes your return on investment by assuring your purchase is safe.

### Plan a smooth transition

Long before your instrument's end-of-production date, Agilent is helping you smoothly transition by taking full advantage of our fixed-cost, multi-year support agreements for continuous support, service, and supplies, and by planning to move to the latest technology. With our wide variety of cost-effective program options, we work to meet your specific support and system requirements throughout each lifecycle. During current production, you can rely on Agilent's highly-rated support to maximize your assets. When your system reaches its end-of-production date you can expect uninterrupted support and parts, as well as a clear and strategic path to the most cost-effective transition options for optimal performance. All the while, our 10-year Value Promise stays in force to ensure your lab gets the most for its budget.

Agilent's first concern is helping you maintain optimal instrument uptime so your lab can be competitively efficient and profitable. Let our range of service options and technology transition solutions protect your investment.

*Mike McMullen*  
*President and CEO, Agilent Technologies, Inc*

# A PROVEN PARTNER FOR YOUR SUCCESS

At Agilent, we look for ways to optimize your lab's performance by enhancing our 45 years of measurement solutions expertise with constant customer communication. That is why you can rely on us to provide the tools you need. Proudly, the Agilent name has become the assurance of unequalled dependability, reliability, ease of use, and enhanced productivity because we rigorously design, test and manufacture our comprehensive array of instruments, supplies, and services to the highest standards. We become your experienced partner delivering unrivaled systems, solutions, technical support, and education to help your lab increase efficiency and profit.

## Plan for uninterrupted lab operation

As your instrument is phased out of production, trust the Agilent support process—from our Service Guarantee to our Value Promise. By informing you along the way, we keep you ahead of the curve in managing the lifetime of your instrument.

### AGILENT VALUE PROMISE - 10 YEARS

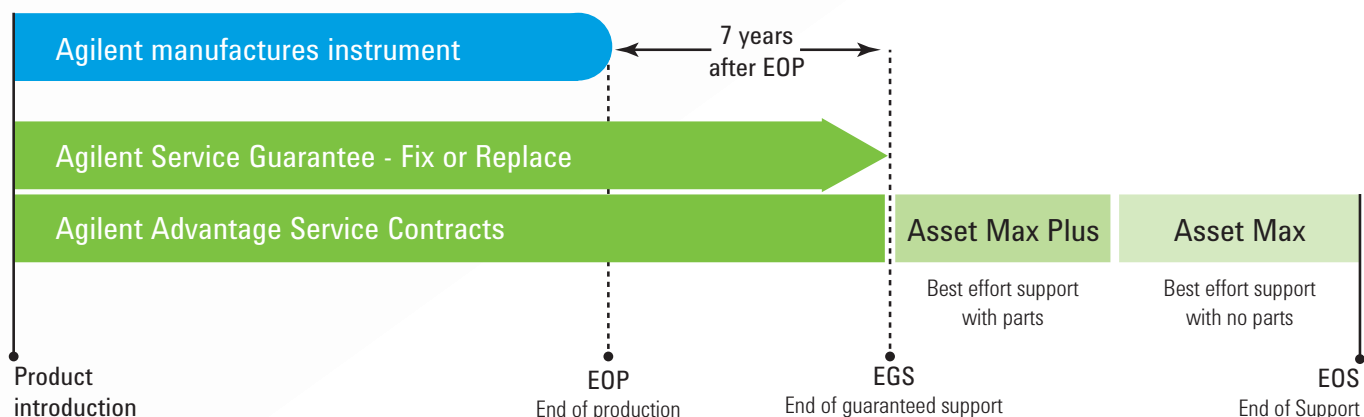
The Agilent Value Promise guarantees you at least 10 years of use of your new instrument, from the date of purchase, or we will credit you with the residual value of that system when you upgrade to a replacement model<sup>1</sup>.

### AGILENT SERVICE GUARANTEE

If you are under an Agilent Advantage contract and a hardware problem cannot be solved immediately, a formal escalation process ensures that key technical and management resources quickly attend to your issue. If this process does not resolve the hardware issue, we will replace your analytical instrument for free. This escalation process exemplifies how Agilent is committed to keeping your lab up and running, no matter what.

Purchase of Instrument

Agilent Value Promise - 10 years of usable life



<sup>1</sup> Applies to current generation Agilent instruments not being used in highly corrosive and bio-hazardous environments

## Contact Us

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Find an Agilent Customer Center  
in your country:

[\*\*agilent.com/chem/contactus\*\*](http://agilent.com/chem/contactus)



An Agilent Service contract guarantees repair of your instrument or we replace it for free.

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