



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 5

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: 000000193062

SO Doc ID: AGR1700000016

Legal Name: SHIMADZU SCIENTIFIC INSTRUMENT

Published Date: 5/1/17

Alias/DBA:

Close Date: 5/18/17

Total Bid: \$132,786.05

Close Time: 13:30

Response Date: 05/18/2017

Status: Closed

Response Time: 5:51

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

Total of Header Attachments: 5

Total of All Attachments: 5



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 ESR05181700000005662	1

VENDOR

000000193062

SHIMADZU SCIENTIFIC INSTRUMENT

Solicitation Number: CRFQ 1400 AGR1700000016

Total Bid : \$132,786.05

Response Date: 2017-05-18

Response Time: 05:51:17

Comments: Thank you for your consideration!

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	\$124,779.300000	\$124,779.30

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	\$650.000000	\$650.00

Comm Code	Manufacturer	Specification	Model #
78121603			

Extended Description : Shipping Charges & Inside Delivery

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Installation/Validation	1.00000	EA	\$3,400.000000	\$3,400.00

Comm Code	Manufacturer	Specification	Model #
73171605			

Extended Description : Installation/Validation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Training/Warranty	1.00000	EA	\$0.000000	\$0.00

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	\$3,956.750000	\$3,956.75

Comm Code	Manufacturer	Specification	Model #
81101706			

Extended Description :	Preventative maintenance
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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:

Shimadzu Scientific Instruments, Inc.  
7102 Riverwood Drive  
Columbia, MD 21046  
800 477 1227

**FOR INFORMATION CONTACT THE BUYER**

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

Signature X

FEIN # 52-1035956

DATE 5/17/17

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	155,050.00	124,777.30

Comm Code	Manufacturer	Specification	Model #
41000000	Shimadzu	ICPMS-2030	ICPMS-2030

**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	650.00	650.00

Comm Code	Manufacturer	Specification	Model #
78121603	N/A	N/A	N/A

**Extended Description :**

Shipping Charges & 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	3400	3400

Comm Code	Manufacturer	Specification	Model #
73171605	Shimadzu	1Q09	N/A

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	16480	0,00

Comm Code	Manufacturer	Specification	Model #
73171605	Shimadzu		

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	4655	3956,75

Comm Code	Manufacturer	Specification	Model #
81101706	Shimadzu	Premium PM	

Extended Description :  
Preventative maintenance

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

AGR1700000016	<b>Document Phase</b> Draft	<b>Document Description</b> Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	<b>Page 4</b> of 4
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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 of 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.

☐

☐

☐

☐

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 cancellation, 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.

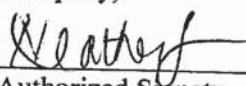
All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for 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.

\_\_\_\_\_  
(Name, Title)  
Heather Juzwa, Field Sales Engineer  
\_\_\_\_\_  
(Printed Name and Title)  
7102 Riverwood Drive Columbia, MD 21046  
\_\_\_\_\_  
(Address)  
800-388-6996 410-290-9140  
\_\_\_\_\_  
(Phone Number) / (Fax Number)  
\_\_\_\_\_  
hljuzwa@shimadzu.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.

Shimadzu Scientific Instruments, Inc.  
\_\_\_\_\_  
(Company)  
 Senior Field Sales Engineer  
\_\_\_\_\_  
(Authorized Signature) (Representative Name, Title)

Heather Juzwa, Field Sales Engineer  
\_\_\_\_\_  
(Printed Name and Title of Authorized Representative)

5/17/17  
\_\_\_\_\_  
(Date)

800-388-6996 410-290-9140  
\_\_\_\_\_  
(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.



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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.

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**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.



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**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.

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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.

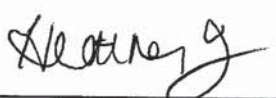
7.2.3 Any other remedies available in law or equity.

**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		1 ea	155,050.00	124,779.30
3.1.1	Shipping charges and inside delivery		1 ea	650.00	650.00
3.1.4	Installation/validation		1 ea	3400.00	3400.00
3.1.7	Training/warranty		1 ea	16,490.00	0.00
3.1.8	Preventative maintenance		1 ea	4655.00	3956.25
	Failure to use this form may result in disqualification			OVERALL	132,786.05
	Bidder / Vendor Information			TOTAL COST:	
Name:	Shimadzu Scientific Instruments Inc.				
Address:	7102 Riverwood Drive				
	Columbia, MD 21046				
Phone:	800-477-1227				
Email Address:	hljuzwa@Shimadzu.com				
Authorized Signature:					



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: Shimadzu Scientific Instruments Inc.

Authorized Signature: [Signature] Date: 5/17/17

State of MARYLAND

County of Baltimore, to-wit:

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

My Commission expires March 14, 2021.

**AFFIX SEAL HERE**

**NOTARY PUBLIC**

[Signature]  
Purchasing Affidavit (Revised 08/01/2015)

Jackie Prescimone  
My Commission Expires  
March 14, 2021



## 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: Shimadzu Scientific Instruments, Inc.

Signed: 

Date: 5/17/17

Title: Field Sales Engineer

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



May 17, 2017

Tara Lyle  
State of West Virginia  
2019 Washington St East  
Charleston, WV 25305

**RE: CRFQ 1400 AGR1700000016 - ICP-MS**

Dear Tara,

I am writing in regards to **CRFQ 1400 AGR1700000016 - ICP-MS.**

As part of our commitment to you getting the most productivity from your instrument, included with your purchase, Shimadzu provides free training with a Specialist to work onsite in front of *your* instrument with *your* users to familiarize them with using the instrument. We do this for as long as all users need to feel comfortable using the instrument. Also included at no charge with your purchase are *three* software and hardware training classes at our Customer Training and Education Center (CTEC) in Columbia, MD. Additionally, free technical support by phone is included for the life of the instrument, regardless of service coverage!

Here are some points regarding the bid specifications:

- Shimadzu's ICPMS-2030 has a double cone interface.
- Shimadzu's ICPMS-2030 has an octopole collision Cell to eliminate spectral/polyatomic interferences using kinetic energy discrimination (KED). Our cell is not a reaction cell.
- Shimadzu's high mass cutoff is 260 nm. However, elements above 260 nm are extremely rare and decay rapidly, making them difficult to analyze.
- We use He in our collision cell.
- Shimadzu's ICPMS-2030 does not have a full color plasma view window. However, people who run ICPMS inspect their cones before after runs and not during the run. If they look ok before the run, you start a batch and walk away to perform other tasks.
- The sizes are as follows: L 53" x W42" x H42" for the ICPMS, 48" x 40" x 40" for the other items
- Shimadzu has included an IQOQ to show instrument performance.
- It is Shimadzu's policy to return phone calls within 2 hours of calling technical support. If it is determined that service is needed, a call will automatically be opened for service to come. This is typically within 48 hours. When we arrive, however, our in-house team has triaged the situation and understands what needs to be done to maximize efficiency.

Thank you for reviewing this proposal in its entirety. We are happy to answer any questions and look forward to the opportunity to help you.

Sincerely,



Heather Juzwa  
Senior Field Sales Engineer



**Customer:**

Tara Lyle  
State of West Virginia  
2019 Washington St East  
Charleston, WV 25305  
Phone: (304) 558-2544  
Fax:  
E-mail: tara.l.lyle@wv.gov

**Sales Engineer:**

Heather Juzwa  
Shimadzu Scientific Instruments  
7102 Riverwood Drive  
Columbia, MD 21046  
Regional Office: (410) 381-1227 Ext. 1673  
Direct Dial: (800) 388-6996  
E-mail: hljuzwa@SHIMADZU.com

**Sales Proposal**

**Quotation:** SSI-114620-V2M0

**Expiration:** 9/29/2017

**Quote Description:**

CRFQ 1400 AGR1700000016 - ICP-MS. ICPMS Dimensions: L 53 x W42 x H42" 48 X 40 X 40 for supporting items.

Shimadzu has included a Premium Preventative Maintenance visit as well.

**Proposed Ship Date:** 90 Days/ARO

**FOB:** COLUMBIA

**Ship Method:** BEST WAY

**Shipping Terms:** PREPAID & ADD

**Incoterms:**

**Additional Information:**

**For proposal questions or modifications, please contact your sales representative.**

**For Order Placement:**

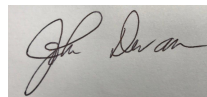
Reference Quotation Number on Purchase Order  
If you are tax exempt, please send a copy of your exemption certificate with your purchase order.  
Certificate may also be faxed to 410-381-1222.

Thank you for your interest in Shimadzu Scientific Instruments.

Shimadzu Scientific Instruments  
7102 Riverwood Drive, Columbia, MD 21046  
Toll Free: 800-477-1227  
Local: 410-381-1227 Fax: 410-381-6781  
E-mail: [customer.service@shimadzu.com](mailto:customer.service@shimadzu.com)

International:  
Fax: 410-309-6130  
E-mail: [icsc@shimadzu.com](mailto:icsc@shimadzu.com)

**Authorization Signature**



John Dwan

**Date: 5/17/2017**

Sales Quotation - please reference the quotation when submitting purchase order.

**ICPMS-2030**

	<b>Product #</b>	<b>Qty</b>	<b>Description</b>	<b>List Price</b>	<b>Ext'd Price</b>
1	211-93150-41	1	Automatic Internal Standard Addition Kit ICPMS	\$1,242.00	\$1,055.70
2	211-92000-58	1	ICPMS-2030 Mass Spectrometer	\$140,658.00	\$119,559.30
3	211-93680-58	1	AS-10 Autosampler	\$4,894.00	\$4,163.20
4	220-95248-02	1	Regulator, Argon or Nitrogen, CGA-580	\$424.00	\$360.40
5	220-91289-00	1	HELIUM REGULATOR	\$763.00	\$648.55
6	211-92962-41	1	Cooling Water Circulator for ICPE-9800, ICPMS-2030	\$6,172.00	\$5,246.20
7	220-95377-10	1	ICPMS Standards Set for EPA 200.8 Rev. 4.4	\$897.00	\$762.45
8	TIER 5 I&F	1	Tier 5 Installation and Customer Familiarization	\$11,200.00	\$0.00
9	1YW	1	1 YEAR WARRANTY	\$0.00	\$0.00
10	220-98085-02	1	IQ & OQ ICPE -sw testing not included	\$1,700.00	\$1,700.00
11	220-98084-00	1	IQ & OQ SOLUTIONS SOFTWARE (File Based Version)	\$1,700.00	\$1,700.00
12	220-99203-20	3	ICP User Training Course, CTEC Facility	\$1,760.00	\$0.00
				<b>\$174,930.00</b>	<b>\$135,195.80</b>

**Shimadzu Workstation**

	<b>Product #</b>	<b>Qty</b>	<b>Description</b>	<b>List Price</b>	<b>Ext'd Price</b>
13	220-97317-70	1	Advanced Workstation PC_2016_Win 10 Pro 64bit	\$3,200.00	\$2,720.00
14	220-97320-10	1	Dell P2210, 22" Professional Widescreen Flat Panel	\$310.00	\$263.50
				<b>\$3,510.00</b>	<b>\$2,983.50</b>

**Service**

	<b>Product #</b>	<b>Qty</b>	<b>Description</b>	<b>Plan Price</b>	<b>Ext'd Price</b>
15	PREMIUM-PM-ONLY	1	Premium Preventive Maintenance Only Service Agreement	\$4,655.00	\$3,956.75
				<b>\$4,655.00</b>	<b>\$3,956.75</b>

<b>Total List Price:</b>	<b>\$183,095.00</b>
<b>Total Line Item Discount:</b>	<b>\$40,958.95</b>
<b>Quote Discount \$ Amt:</b>	<b>\$10,000.00</b>
<b>Quote Sub-Total:</b>	<b>\$132,136.05</b>
<b>Estimated Freight:</b>	<b>\$650.00</b>
<b>Total Amount:</b>	<b>\$132,786.05</b>



## Service Agreement Plans Available

### As Quoted

Quantity	Plan Name	Plan Price	Products Covered
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### Descriptions of Service Coverage

#### Preventative Maintenance

Preventative Maintenance (PM) visits will be scheduled by SSI at the mutual convenience of the buyer and SSI, or performed during any other service visit. PM visits, when provided under this Agreement, may include necessary cleaning, adjustments, verification, lubrication and parts replacement according to the PM checklist. Labor, travel expenses, and selected consumable parts will be included during the PM visit at no additional cost to the buyer.

#### Premium Preventative Maintenance

Premium Preventative Maintenance visits will be scheduled by SSI at the mutual convenience of the customer and SSI, or performed during any other service visit. This Premium PM will be performed by SSI according to established SSI procedures. Premium PM visits, when performed under this Agreement, will include necessary cleaning, adjustments, verification, lubrication and parts replacement. Labor, travel expenses and selected consumables parts\* (list of parts available upon customer request) will be included during the Premium PM visit at no additional cost to the customer. A travel zone fee is added to the agreement to cover travel costs. Purchase of the Premium PM option does not excuse Customer from performing normal daily, weekly or monthly maintenance that may be required.

#### Extended Warranty

Extended Warranty coverage includes all labor and parts (excluding consumables) necessary to restore the products to operating specifications.

This coverage level is not available for MS products and the associated turbo and roughing pumps. The MS products require a coverage level which includes a Premium PM.

#### Extended Warranty Plus

A combination of one scheduled Premium PM visit and Extended Warranty Coverage. Premium Preventative Maintenance visits will be scheduled by SSI at the mutual convenience of the customer and SSI, or performed during any other service visit. Premium PM visits, when performed under this Agreement, will include necessary cleaning, adjustments, verification, lubrication and parts replacement. Labor, travel expenses and selected consumables parts\* (list of parts available upon customer request) will be included during the Premium PM visit at no additional cost to the customer. The extended Warranty Includes all labor and parts (excluding consumables outside of PM) necessary to restore the products to operating specifications. A travel zone charge is added to the contract to cover travel costs. In the event of a covered product failure, SSI will use its best effort to provide on-demand service.

#### Premium Total Coverage

This level of agreement provides the customer with a level of coverage includes all labor and non-consumable parts, a Premium PM visit, and in addition provides for the replacement of consumable parts outside of a PM visit at no additional cost to the buyer. Use of this level of Service will be monitored by SSI and in the event that the buyer's use does not exceed two visits during the effective dates of the agreement, the buyer will be entitled to an agreed upon rebate at the end of the agreement term. This rebate must be applied to the purchase of future service agreements or other services offered by SSI.

Sales Quotation - please reference the quotation when submitting purchase order.

### Line Item Descriptions

#### Product # Description

#### PREMIUM-PM-ONLY

Premium Preventative Maintenance visits will be scheduled by SSI at the mutual convenience of the customer and SSI, or performed during any other service visit. This Premium PM will be performed by SSI according to established SSI procedures. Premium PM visits, when performed under this Agreement, will include necessary cleaning, adjustments, verification, lubrication and parts replacement. Labor, travel expenses and selected consumables parts\* (list of parts available upon customer request) will be included during the Premium PM visit at no additional cost to the customer. A travel zone fee is added to the agreement to cover travel costs. Purchase of the Premium PM option does not excuse Customer from performing normal daily, weekly or monthly maintenance that may be required.

#### ICPMS-2030

#### 211-93150-41 Automatic Internal Standard Addition Kit ICPMS

Allows for the automatic addition of internal standards for the ICPMS.

#### 211-92000-58 ICPMS-2030 Mass Spectrometer

The ICPMS-2030 provides excellent sensitivity achieved by the optimized internal structure including a newly-developed collision cell. It also operates at a low running cost by minimizing the flow rate of argon gas necessary for analysis to the lowest level in the industry by the use of the Shimadzu's proprietary mini torch and Eco mode. The Development Assistant function of the software automatically sets the optimum analysis conditions for quantitative analysis and the Diagnosis Assistant function automatically performs validation for data necessary after measurement. These functions reduce users' work for more efficient analysis procedures and improve the reliability of data. The software is also compliant to FDA 21 CFR Part 11 and compatible with LabSolutions DB/CS.

#### 211-93680-58 AS-10 Autosampler

AS-10 is a random access 60 sample position, 8 reagent position, covered auto sampler featuring a dual overflow style rinse mechanism guaranteeing lowest possible carryover and fastest washout times.

All Glass sample vials are available, 220-95306-01.

#### 220-95248-02 Regulator, Argon or Nitrogen, CGA-580

Pressure Regulator for AA systems with 1/4 inch barbed nipple, for Argon.

Pressure Regulator for AA systems with 1/4 barbed nipple. For Argon. CGA 580.

#### 220-91289-00 HELIUM REGULATOR

A 0-100 psi single stage cylinder regulator for nitrogen. CGA inlet and 1/4" NPT outlet. Requires adapter 220-91287-00 for 1/4" NPT - 1/4" Swagelok output format to ELSD-LT gas tubing.

Not required if customer wishes to use "house" air/nitrogen.

#### 211-92962-41 Cooling Water Circulator for ICPE-9800, ICPMS-2030

Cooling water circulator used for cooling the ICPE-9000 is quiet, high efficiency chiller that is easy set controls and includes water level sensor.

Requires Cooling Water Connection Kit (211-92884-41)

Size :W377×D500×H615 mm

Power supply: AC200 V-230 V, 50/60 Hz, 2 kVA

Weight : 43 kg

#### 220-95377-10 ICPMS Standards Set for EPA 200.8 Rev. 4.4

Standards Set for EPA 200.8 is a kit of 5 Calibration standards in 125mL vials, 2 Internal Standards Solutions in 125mL, 2 Quality Control solutions in 125mL, 1 Tuning Solutions in 125mL. All Solutions are certified reference material set in a nitric/tartaric/hydrofluoric acid matrix for stability. This standards are traceable to NIST and manufactured in accordance with stringent Quality Assurance guidelines. One year Expiration Date. Certificates and MSDS are included.



Se 10 ppm

**TIER 5 I&F Tier 5 Installation and Customer Familiarization**

**1YW 1 YEAR WARRANTY**

1 YEAR WARRANTY

**220-98085-02 IQ & OQ ICPE -sw testing not included**

**220-98084-00 IQ & OQ SOLUTIONS SOFTWARE (File Based Version)**

IQOQ for validation of Shimadzu solution software products. Includes pc. Does not include the validation documentation for Class-Agent software.

**220-99203-20 ICP User Training Course, CTEC Facility**

Training Course for ICP System provides intensive two (2) days, hands-on experience with the ICPE-9800/9000 or ICPMS-2030 hardware and associated ICPSolution software. Theory, operation and routine maintenance are included. Course is by Special Arrangement so it will be tailored to the instrument configuration and requirements of the customer.

Special Arrangement Only

**Shimadzu Workstation**

**220-97317-70 Advanced Workstation PC\_2016\_Win 10 Pro 64bit**

Operating systems include Windows® 10 PRO 64bit (installed). System incorporates 16GB DDR4 UDIMM 2133 memory (expandable to 64GB), 2T (2 x 1000 GB) SATA hard drives (RAID 1), 16X Dual layer DVD-RW, +R/RW Combo Drive. Included are USB keyboard, Optical Wheel mouse, 2GB AMD FirePro W5100, 3 Monitor Graphics Card, Intel Integrated Gigabit 10/100/1000 network connection, Broadcom 5722 Single Port Gigabit Ethernet PCI-Express Network Interface Card, One PCIe x16 Gen 3; one PCIe x16 Gen 2 wired x4; one PCIe x1; One PCI 32bit/33MHz, one Serial Port (RS-232), 7 USB 2.0 ports, 4 USB 3.0 ports (2 front, 6 back 3 Internal). Integrated High Definition Audio (no speakers).  
 Warranty: Three year limited warranty with three years

**220-97320-10 Dell P2210, 22" Professional Widescreen Flat Panel**

22" LCD display, resolution to 1680 x 1050, contrast ratio (typical): 1000:1. Brightness (typical): 300 cd/m2, 0.282 mm pixel pitch.

Limited warranty: Three years Advanced Portable Exchange through Dell.

## Terms and Conditions

### SALES AGREEMENT

The sales agreement ("Sales Agreement"), as referenced herein below, shall mean and refer to these General Terms and Conditions of Sale ("General Terms and Conditions of Sale"), together with such other documents concerning the purchase of equipment and/or Products designed and/or manufactured by Shimadzu ("Products"), which documents have been or will be executed by and between Shimadzu Scientific Instruments, Inc. ("SSI") and the individual or entity identified therein as the purchaser of said Products ("Buyer"). The documents that comprise the Sales Agreement may include, but are not limited to: these General Terms and Conditions of Sale; price quote provided by SSI; purchase order issued by Buyer as modified and accepted by SSI; bill of sale for Products; bill of lading issued for the shipment of Products; and product invoice. **All Products except designated CL versions of HPLC and LCMS, shall be for research use only and not for use in the diagnosis of disease or other conditions, including a determination of the state of health, in order to cure, mitigate, treat or prevent disease or its sequelae ("Diagnostic Purposes").**

### PRICES

The prices set forth in the Sales Agreement:

- (i) are SSI's domestic prices based upon manufacture of the quality and type of Product(s) ordered for shipment to and end use within the United States - all Products shipped for end use outside the United States shall be subject to SSI's international pricing;
- (ii) are subject to revision when interruption, engineering changes or changes in quantity or quality are caused or requested by Buyer; and
- (iii) unless otherwise specified, do not include warranty service or installation outside the United States. Errors in Product pricing or related terms by SSI which may, in SSI's sole discretion, be deemed clerical errors are subject to correction by SSI at any time.

### SPECIFICATIONS

Weights and dimensions set forth in Product related sales literature ("Sales Literature") are not guaranteed unless previously certified in writing. SSI may, without affecting the obligations under the Sales Agreement, make what SSI regards in its sole discretion as minor changes to the specifications of the Product or Products delivered under the Sales Agreement from those contained in Sales Literature.

### TERMS OF PRODUCT USE

**Buyer represents and warrants that the Products have not been purchased for Diagnostic Purposes and that the Buyer will not at any time use the Products for Diagnostic Purposes, except designated CL versions of HPLC and LCMS Products. The Buyer acknowledges that use of the Product for Diagnostic Purposes is cause for Termination of this Agreement, as set forth in the "Contingencies; Force Majeure" section below.**

### TERMS OF PAYMENT

Subject to credit approval by SSI, terms of payment on the Sales Agreement are net thirty (30) days from date of the invoice unless otherwise specifically stated on the invoice, by check, wire. Payment by credit card is subject to 3% charge back at time of payment. Invoices are payable at par on date due at any place of collection designated by SSI in funds bankable at par. Payment made beyond terms will be subject to simple interest of 1 -1/2% per month on the outstanding balance. All orders are accepted and SSI's obligation to make deliveries, are subject to SSI's right to either:

- (i) require Buyer to make payment of all or any part of the purchase price in advance of delivery of Product(s), or
- (ii) make shipment of Product(s) to Buyer payable C.O.D.

If Buyer fails to make advance payment when requested to do so by SSI or if Buyer is or becomes delinquent in the payment of any sum of any kind due SSI or refuses to accept C.O.D. shipments (whether or not arising out of the Sales Agreement), then SSI shall have the right, in addition to any other remedy to which it may be entitled in law or in equity, to cancel the Sales Agreement, refuse to make further deliveries, and declare immediately due and payable all unpaid amounts for Products and services previously delivered to or performed for Buyer. Each shipment shall be considered a separate and independent transaction and payment therefor shall be made accordingly. Buyer must notify SSI within fifteen (15) days from the invoice date if Buyer has not received the Product(s).

### REPOSSESSION

In the event of nonpayment, either of the entire purchase price or a portion thereof, Buyer expressly consents to the right of SSI to reclaim by repossession of any and all Products delivered to Buyer pursuant to the Sales Agreement for which payment has not been made within (90) days of invoice. In the event that SSI elects to exercise its right to reclaim Products by repossessing the same, said election shall be deemed to be in the alternative and not to the exclusion of any other remedy to which SSI may be entitled, at law or in equity. To the extent that SSI successfully reclaims Products, it shall credit Buyer's account for the value of the same, as determined by SSI in its sole discretion. No Products may be reclaimed by repossession unless and until Buyer is provided with prior notice of SSI's intention to elect such remedy. Such notice shall state the date, time and location that Products shall be available for repossession. Such notice shall also provide Buyer with a final opportunity to cure the default of nonpayment within five (5) days of notice to avoid the execution of the remedy of repossession. The costs of repossession, including legal fees and costs of collection, shall be added to Buyer's account.

### SECURITY INTEREST

In addition to any other remedies hereunder or otherwise provided at law or in equity, SSI shall have the right, and Buyer hereby grants SSI the right, without further notice to or consent from Buyer, to secure any and all payment obligations of Buyer by recordation of a security interest in the Products that are the subject of the Sales Agreement. Said security interest shall be in the form of a UCC Financing Statement (UCC Form 1) or other form prescribed by contract or applicable law. No UCC Financing Statement recorded for the benefit of SSI will be released unless and until all financial obligations to SSI incurred by Buyer with respect to the Products have been fully satisfied.

### SHIPMENTS

- (i) The cost of packaging for domestic shipments is included in the quoted price unless otherwise provided. For international shipments or where special packaging is specified or necessary, a charge will be made to cover such expense.
- (ii) For shipments to and from places within the United States, all shipments, unless otherwise agreed in writing, shall be FOB point of shipment and title and risk of loss or damage shall pass to Buyer at the point of shipment. The cost of transportation and insurance (if requested by Buyer) shall be borne by Buyer.
- (iii) For shipments from the United States to ports and or places outside the United States all shipments are, unless otherwise agreed in writing, FOB Columbia, MD. SSI's obligation to affect shipment of the Products purchased by Buyer shall be fully discharged, and beneficial ownership, legal title and all risk of loss or damage shall pass to Buyer when the Products are made available for shipment to a carrier at the designated FOB location. If shipped FOB Destination, upon arrival Buyer shall be entitled to conduct a reasonable investigation of the Products purchased by it, but all claims for losses due to loss or damage to Products while in transit shall be waived unless made immediately in writing by Buyer to SSI, but not more than (30) thirty days after arrival. If Buyer shall fail or refuse to accept delivery of any of the Products for unverifiable claims for loss or damage to Products occurring while in transit, all sums paid on deposit shall be retained by SSI as liquidated damages, provided, however, that SSI may recover in full its actual damage from Buyer in the event that actual damages exceed the amount retained as liquidated damages.
- (iv) All claims for damage or loss of insured shipments shall be immediately communicated, when possible, to SSI at Shimadzu Scientific Instruments, Inc. 7102 Riverwood Drive, Columbia, Maryland 21046-2502 Attn: Customer Service, Phone: (410) 381-1227.

Buyer shall immediately notify delivering carrier of loss or damage to the shipment and SSI will cooperate with Buyer in the adjustment of all claims. Buyer agrees to permit SSI or SSI's representative to inspect damaged Products.

### TERMINATION

Upon any termination or cancellation of the Sales Agreement by Buyer (if otherwise specifically permitted by the terms of the Sales Agreement), either in whole or in part, Buyer agrees to promptly pay appropriate termination or cancellation charges invoiced by SSI. At SSI's sole discretion, the termination charge shall be not less than twenty percent (20%) of the total amount of the Sales Agreement.

### RETURNED PRODUCTS

All returns must be pre-authorized by SSI and a Return Goods Authorization ("RGA") number must appear on the face of the package. Returned Products will be subject to a restocking charge. If deemed appropriate at SSI's sole discretion, the restocking charge shall be not less than twenty percent (20%) of the total amount of the Sales Agreement.

### ALLOCATION OF PRODUCTS

If SSI is unable for any reason to supply the total demands for Products specified in Buyer's order, SSI may allocate its viable supply among any or all buyers, including Buyer, on such basis as SSI may deem fair and practical, without liability for any failure of performance which may result therefrom.

### DELIVERY

The scheduled shipping or delivery date shown on the face hereof is SSI's best estimate of the time the Product order will be shipped and SSI assumes no liability for loss, general damages, or special or consequential damages due to delays.

### TAXES AND OTHER CHARGES

All taxes on Products, goods and/or services sold under the Sales Agreement, including but not limited to federal, state and local excise, sales or use taxes, shall be borne solely by Buyer. Buyer shall be obligated to pay all taxes set forth on invoices, in accordance with the terms of payment, provided that SSI shall not invoice taxes when within 30 days of placing the order, Buyer has furnished SSI with written proof of exemption from tax in the form of a certificate of exemption or an equivalent document which Buyer represents and warrants is properly completed and validly executed. If, notwithstanding the foregoing, any taxing authority attempts to assess taxes, Buyer shall indemnify and hold harmless SSI from any loss, damage, claim or cause of action, including, but not limited to, tax, interest, penalties and professional fees, related to such attempted assessment and shall make payment to SSI for any such costs paid by SSI and invoiced to Buyer in accordance with the terms of payment.

### PATENTS

SSI shall defend any suit or proceeding brought against Buyer so far as based upon an assertion that any Product furnished under the Sales Agreement constitutes a direct infringement of any United States patent having a claim of claims covering solely the Product itself, if notified promptly in writing and given authority, information and assistance (at SSI's expense) for the defense of same, and SSI shall pay all damages and costs awarded therein against Buyer. In the event said Product in such suit is held to constitute infringement and the use of said Product is enjoined, SSI shall, at its own option and at its own expense, either:

- (i) procure for Buyer the right to continue using said Product, (ii) replace the same with a non-infringing Product, (iii) modify it so it becomes non-infringing, or (iv) remove said Product and refund the purchase price and transportation costs thereof.

The foregoing obligations of SSI shall not apply to any infringement claim based upon:

- (i) any use of any Product sold hereunder in any process or in conjunction with any other product, (ii) any Product manufactured to Buyer's design or any Product having a design arising from SSI's compliance with

Buyer's specifications; or (iii) use of any Product sold hereunder, if the Product has been modified or customized by Buyer.

The foregoing sets forth the entire liability of SSI for patent infringement by said Product. If any suit or proceeding is brought against SSI based on claims that the goods manufactured by SSI in compliance with Buyer's specifications and supplied to Buyer directly infringe any fully issued United States patent, then the patent indemnity obligations herein stated with respect to SSI shall reciprocally apply with respect to Buyer.

#### WARRANTY

Subject to the exceptions and upon the conditions stated below, SSI warrants that the Products sold under the Sales Agreement shall be free from defects in workmanship and materials for one year after shipment of the Products to the original Buyer by SSI (the "Warranty"), and if any such Products should prove to be defective within such one year period, SSI's sole liability (and Buyer's sole and exclusive remedy) shall be, at its option, either (i) to correct by repair or, at SSI election, by replacement with equivalent product any such defective Product, provided that investigation and factory inspection discloses that such defect developed under normal and proper use, or (ii) to refund the purchase price. The exceptions and conditions mentioned above are as follows:

- (i) Components or accessories manufactured by SSI which by their nature are not intended to and will not function for one year are warranted only to give reasonable service for a reasonable time; what constitutes reasonable time and reasonable service shall be determined solely by SSI. A complete list of such components and accessories is maintained at the factory;
- (ii) SSI makes no warranty with respect to components or accessories not manufactured by it, in the event of defect in any such component or accessory SSI will give reasonable assistance to Buyer in obtaining from the respective manufacturer whatever adjustment is authorized by the manufacturer's own warranty;
- (iii) any Product claimed to be defective must, if required by SSI, be returned to the factory, transportation charges prepaid, and will be returned to Buyer with transportation charges collect unless the Product is found to be defective, in which case SSI will pay all transportation charges;
- (iv) if the Product is a reagent or the like, it is warranted only to conform to the quantity and content and for the period (but not in excess of one year) stated on the label at the time of delivery;
- (v) SSI may from time to time produce a special printed warranty with respect to a certain Product, and where applicable, such warranty shall be deemed incorporated herein by reference;
- (vi) SSI shall be released from all obligations under all warranties, whether expressed or implied, if any Product covered hereby is repaired or modified by persons other than its own authorized service personnel unless such repair by others is made with the written consent of SSI; and
- (vii) SSI's obligations pursuant to all warranties, either express or implied, shall be expressly conditioned upon payment in full by Buyer for the Products covered by the warranties. In the event of non-payment, whether for the entire purchase price or a part thereof, SSI shall be released from all obligations under all warranties, either express or implied.

IT IS EXPRESSLY AGREED THAT THIS WARRANTY SHALL BE IN LIEU OF ALL WARRANTIES OR WARRANTY OF ANY NATURE WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS AND MERCHANTABILITY, AND THAT NEITHER BUYER NOR SSI SHALL HAVE ANY LIABILITY FOR SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CAUSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO LOSS OF USE, LOSS OF DATA, LOSS OF PRODUCTIVITY, LOSS OF BUSINESS, LOSS OF PROFIT, LOSS OF PLANT, EQUIPMENT OR PRODUCTION. THE LIMITATION OF LIABILITY FOR SUCH DAMAGES SHALL BE APPLICABLE EVEN IF SSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING OUT OF THE MANUFACTURE, USE, SALE, HANDLING, REPAIR, MAINTENANCE OR REPLACEMENT OF ANY OF THE PRODUCTS SOLD UNDER THE SALES AGREEMENT.

If an SSI Special Warranty (covering a designated item or items) is contained in the manual or is otherwise shipped with such designated item or items, the terms and conditions specified therein are incorporated herein by reference and shall supplement the foregoing warranty. In the event of a conflict between the terms and conditions specified herein and those specified in such Special Warranty, the terms and conditions specified herein shall control. SSI's warranties made in connection with this sale shall not be effective if SSI has determined, in its sole discretion, that Buyer has misused the Products in any manner, has failed to use the Products in accordance with industry standards and practices, or has failed to use the Products in accordance with instructions, if any, furnished by SSI. Representations and warranties made by any person, including dealers and representatives of SSI, which are inconsistent or in conflict with the terms of this warranty, shall not be binding upon SSI unless expressly assumed in a writing that is approved and signed by an authorized officer of SSI. By signing the Sales Agreement, the Buyer specifically acknowledges that no representations or warranties were made by any person, including dealers and representatives of SSI, that the Product may be used for Diagnostic Purposes.

#### CONTINGENCIES; FORCE MAJEURE

SSI shall be entitled to cancel or rescind the Sales Agreement, without liability for loss or damage resulting therefrom, if:

- (i) any Product covered by the Sales Agreement is purchased for end use outside the United States; (ii) the Buyer breaches any of its representations or warranties found in this Agreement; or
- (iii) the performance of SSI's obligations under the Sales Agreement is in any way adversely affected by the occurrence of any contingency beyond the control of either SSI or SSI's suppliers, including but not limited to:

- (a) war (whether an actual declaration thereof is made or not), sabotage, insurrection, riot, act of a public enemy, or other act of civil disobedience;
- (b) failure or delay in transportation;
- (c) act of any government, government agency or subdivision of any government, or any judicial action affecting the terms of the Sales Agreement;
- (d) labor dispute, shortage of labor, fuel, raw material or technical or yield failure where SSI has exercised ordinary care in the prevention thereof; and
- (e) accident, fire, explosion, flood, storm or other act of God.

#### U.S. GOVERNMENT CONTRACTS

If the Products to be furnished under the Sales Agreement are to be used in the performance of a U.S. Government contract or subcontract, and a U.S. Government contract number shall appear on Buyer's order, those clauses of the applicable U.S. Government procurement regulations that are required to be included in U.S. Government contracts and subcontracts shall be incorporated herein by reference, including, without limitation, the Federal Acquisition Regulations and the Fair Labor Standards Act of 1938, as amended.

#### INDEMNIFICATION:

Buyer shall at its own expense apply for and obtain any permits and inspections required for the installation and/or use of the Products. SSI makes no promise or representation that the Products or related services will conform to any federal, state or local laws, ordinances, regulations, codes or standards, except as particularly specified and agreed upon in writing by an authorized representative of SSI. SSI's Products are not for use in or with any nuclear facility unless specifically so stated by SSI in writing. SSI's Products are not for use for Diagnostic Purposes. SSI shall not be responsible for any losses or damages sustained by Buyer or any other person as a result of improper installation or misapplication of the Products. Buyer shall defend, indemnify and hold harmless SSI and its agents and employees against any loss, damage, claim, suit, liability, judgment or expense (including, without limitation, attorney's fees) arising out of or in connection with any injury, disease or death of persons (including, without limitation, Buyer's employees and agents) or damage to or loss of any property or the environment, or violation of any applicable laws or regulations resulting from or in connection with the sale, transportation, installation, use, or repair of the Products by Buyer or of the information, designs, services or other work supplied to Buyer, whether caused by the concurrent and/or contributory negligence of Buyer, SSI, or any of their agents, employees or suppliers. The obligations, indemnities and covenants contained in this paragraph shall survive the consummation or termination of this transaction.

#### CONFIDENTIAL INFORMATION

Except as required by law, neither party shall use (except for purposes connected with the performance of its obligations hereunder), divulge or communicate to any third party any information of the other it reasonably knows to be confidential.

#### FDA REQUIREMENTS

If any Product sold by SSI to Buyer is subject to regulation by the Food and Drug Administration as a device, then as to any such Product, sale and delivery is contingent upon successful completion and processing of a 510(k) notice. If such a 510(k) notice cannot be obtained by SSI, SSI shall have no obligation to deliver the Product.

#### COMPLIANCE WITH LAWS

Buyer agrees to comply fully with all federal, state, county and local laws, rules and regulations concerning the purchase, sale and use of Products. Without limiting the foregoing, Buyer agrees to comply with any the Export Administration Regulations; Federal Food, Drug & Cosmetics Act; the International Traffic In Arms Regulations of the United States; and the Foreign Corrupt Practices Act of the United States in so far as they apply to the sale of Products. To the extent the Products require license for export, the Products are licensed by the United States for delivery to the ultimate destination as shown on the shipment/invoice address and any contrary diversion may be prohibited by law.

#### APPLICABLE LAW, JURISDICTION VENUE

The Sales Agreement is made and entered into, and shall be governed, enforced and interpreted in accordance with the laws of the State of Maryland. The Buyer hereby expressly consents to the jurisdiction of the courts of the State of Maryland with regard to all issues and questions of law or fact pertaining to the Sales Agreement. In the event that either party commences litigation to enforce the Sales Agreement, said litigation shall be brought in the courts of Howard County, Maryland. The prevailing party to any such action shall be entitled to an award of all costs and attorney's fees actually incurred.

#### GENERAL PROVISIONS

The rights and obligations under these General Terms and Conditions of Sale will inure to the benefit of, and be binding upon the parties hereto and their respective heirs, administrators, executors, personal representatives, successors and permitted assigns. No action, failure of action or delay by either party will constitute a waiver of any of its rights or remedies under these General Terms and Conditions of Sale. SSI and Buyer are not, and will not be, joint ventures, partners, agents, servants, or employees or fiduciaries of the other, and do not have the power to bind or obligate the other. The waiver of a breach of any provision does not constitute a waiver of a subsequent breach of the same or different provision. If any of the terms of these General Terms and Conditions of Sale or the Sales Agreement are subsequently or are now illegal, they will be severed without affecting the remaining terms. The section headings are for reference only and will not be considered controlling as to the content and/or interpretation of any section.

#### ENTIRE AGREEMENT

These General Terms and Conditions of Sale, together with the Sales Agreement, and any attachments, exhibits and supplements specifically referred to in the Sales Agreement, are intended by the parties as a complete and exclusive statement of the terms of their agreement, and supersede all prior agreements, written or oral. No course of prior dealings between the parties and no usage of the trade may be used by Buyer to supplement or explain any term used herein.

#### END GENERAL TERMS AND CONDITIONS OF SALE

This document contains the number of pages indicated, including all attachments. Authorized signature required on quotation pages



Inductively Coupled Plasma Mass Spectrometer

# ICPMS-2030





# Accelerating Reliable Performance



- ▶ The first system in the industry to include functions for assisting with analytical method development and diagnostics.
- ▶ Newly developed collision cell provides high sensitivity and low interference.
- ▶ Unique system developed by Shimadzu results in the industry's lowest running costs.

\* As of February 2016, based on data obtained by Shimadzu



# Two Assistant Functions Simplify Analysis

The Development Assistant simplifies the process of developing analytical methods. The Diagnosis Assistant automatically diagnoses spectral interference. Together, they provide analytical results with exceptionally high reliability.





# Development Assistant Function Ensures Analytical Methods Can Be Developed with Confidence by Anyone.

## Development Assistant

Creating analytical methods for ICPMS-2030 analysis involves only selecting the measured and target elements, even for samples being analyzed for the first time. Then, based on the qualitative analysis data (for all mass numbers) from a representative

sample, the Development Assistant automatically selects the optimal mass numbers and internal standard elements for the target measurement elements and automatically specifies the concentration range for calibration curve samples.

### Conventional Method Development Process (when analyzing a sample for the first time)

Prepare sample (pretreat sample)

Qualitatively analyze all elements

Determine optimal mass numbers for target measurement elements

- (1) Isobaric ions
- (2) Oxide ions (Check mass numbers 16 less than target mass numbers.)
- (3) Divalent ions (Check mass numbers twice the target mass numbers.)

Example: Determining optimal mass number for Cd

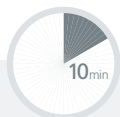
- (1) Select mass number from mass number list.  
=> Select 111 Cd with no isobaric ions.
- (2) Check spectra for oxide ions ( $111 - 16 = 95$ ) that might interfere with 111 Cd.
- (3) Check spectra for divalent ions ( $111 \times 2 = 222$ ).

Select internal standards  
(Select optimal elements and mass numbers)

- Criteria for selecting internal standard elements
1. Quantity in sample is less than 1/100 of quantity added.
  2. Mass number is near target measurement element.
  3. Ionization energy is close to ionization energy of measurement element.
  4. Not easily affected by spectral interference
  5. Does not cause interference with spectra of target measurement elements.
  6. Elements and mass numbers are detectable with sufficient sensitivity.

Specify calibration curve sample

Method completed in **10 minutes**



### Creating Analytical Method Using Development Assistant

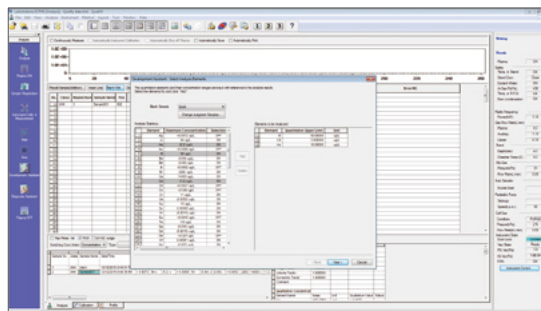
Prepare sample (pretreat sample)

Qualitatively analyze all elements

Select target measurement elements

The Development Assistant function automatically sets the optimal mass numbers and internal standard elements for the target measurement elements, and suggests a calibration scheme.

Method completed in **2 minutes**





## Obtain Reliable Results Quickly with the Diagnosis Assistant Function.

### Diagnosis Assistant

The Diagnosis Assistant automatically diagnoses spectral interference, based on data measured from all mass numbers. Even when using an already established method for routine analysis, the software analyzes data for any spectral interference to determine if a problem occurred.

#### Checking Data Conventionally

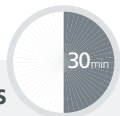
##### Check measurement results (all samples)

- If only target elements are measured, then information about other elements is not obtained, which means the presence of interference cannot be determined.
- When spectra are measured for both target elements and other elements, then interference with target measurement elements is confirmed just like it is for method development.

Check all samples for the above.

Determine methods for correcting any problems.

Checking process completed in **30 minutes**

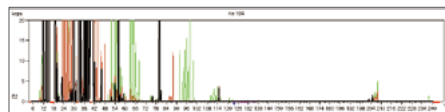


#### Checking Data Using Diagnosis Assistant

##### Check measurement results (all samples)

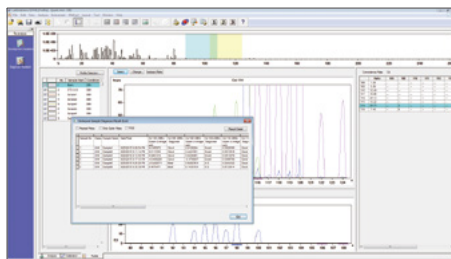
Diagnosis Assistant automatically checks for any spectral interference based on data for all elements and all mass numbers measured from all samples.

All Element and Mass Data



If a problem occurs, it indicates the type of problem and the sample where the problem occurred.

Checking process completed in **3 minutes**







# Unique Combination Eco Mode/Mini-Torch Reduces Running Cost by Dramatically Reducing Gas Consumption

In addition to lower running costs, the environmentally-friendly mini-torch plasma unit, developed by Shimadzu, minimizes the energy (electricity) consumed in producing and maintaining an argon plasma.

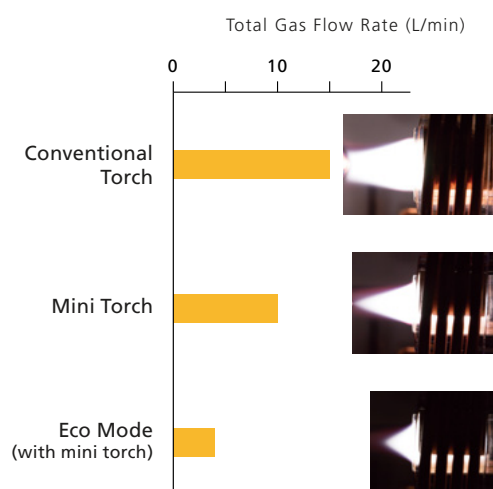
## Three Factors That Reduce Running Costs

### Mini-Torch Plasma Unit

One of the highest costs associated with ICP-MS systems is the large quantity of argon gas they consume. However, Shimadzu's proprietary mini-torch plasma system consumes two-thirds the argon gas (10 L/min) as conventional plasma torches. Consequently, one gas cylinder of argon (~7,800 liters) allows for approximately ten hours of continuous operation.

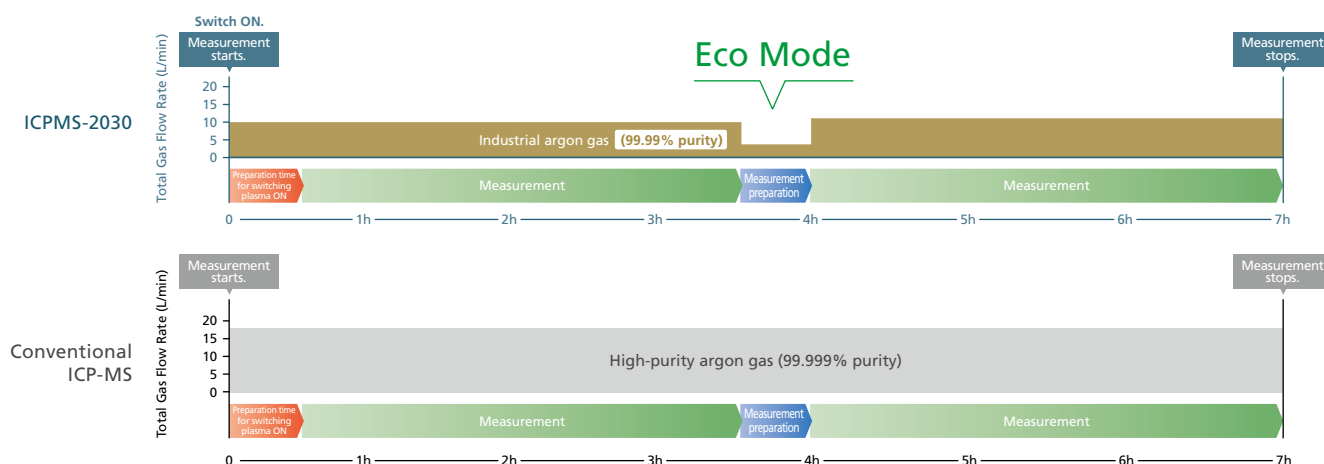
### Eco Mode (5 L/min of Plasma)

During standby when Eco mode is active, the plasma gas flow and power are reduced to 5 L/min and 0.5 kW to minimize the required gas and electricity; however, analysis can be started immediately with no loss of productivity.



### Low-Purity Argon Compatible

High-purity argon gas required by conventional systems is no longer necessary. Using less expensive argon gas (99.95%) over a three-year period can reduce costs by several tens-of-thousands of dollars.



# Designed for High Stability and Low Running Costs

## More Compact Vacuum System!

The smaller three-stage split-flow turbomolecular pump is especially easy to maintain, maximizing up-time of the instrument.

## Secondary Electron Multiplier Tube Detector!

The 9-digit dynamic range detector allows for measuring major components and trace components simultaneously with high sensitivity.

## Lens System Minimizes Contamination!

Located behind the newly developed collision cell, the focusing lens improves ion transmission efficiency and elimination of light emission from the plasma.

\* Light emission removal is especially important when combining with Laser Ablation systems.

## Newly Developed Collision Cell!

The newly developed collision cell achieves superior sensitivity by providing highly efficient molecular ion removal and high elemental ion transmission using only helium gas.



## Newly Designed Interface!

The newly designed interface allows for easy maintainability. All parts can be removed and installed without the need for tools, which helps minimize downtime associated with cleaning and servicing.

## High Stability and Flexibility! New High-Frequency Power Supply!

Shimadzu is the world's first ICP manufacturer to develop an all-solid-state high-frequency power supply. Due to Shimadzu's extensive experience, this free-running type high-frequency power supply unit offers the highest output stability.

\* As of February 2016, based on data obtained by Shimadzu

## High Stability and Low Running Costs

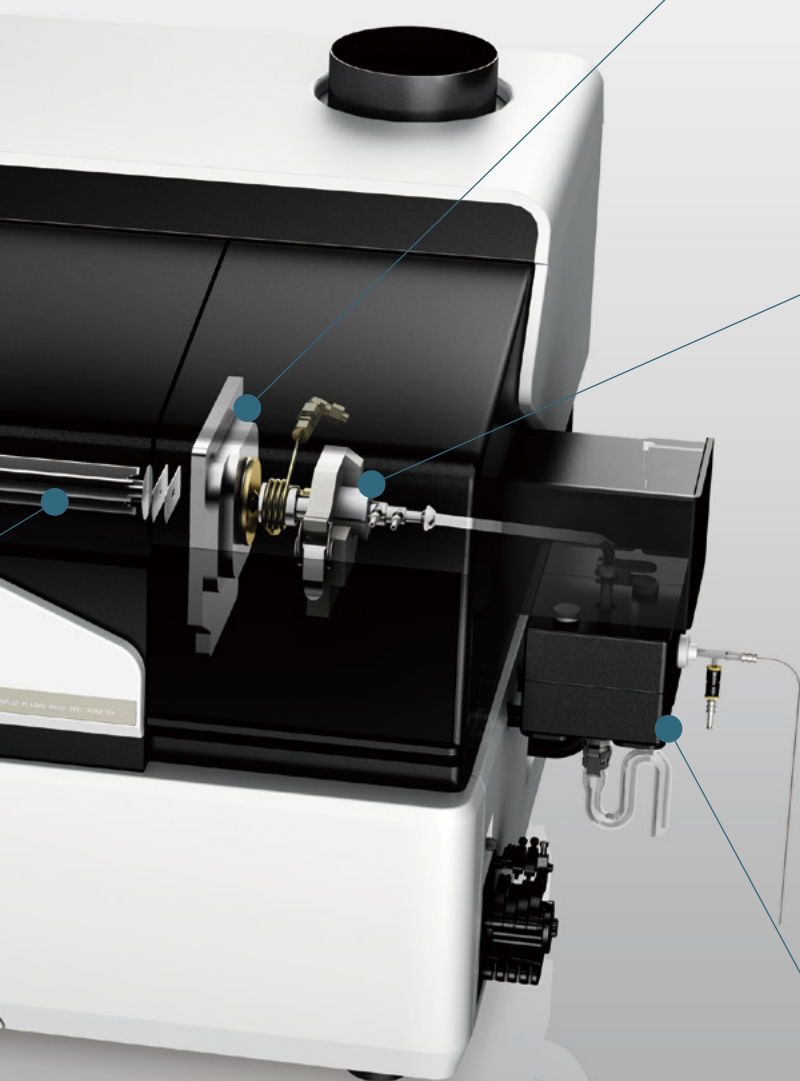
### Shimadzu's Proprietary Mini-Torch Plasma System

Based on Shimadzu's extensive experience developing ICP emission spectrometers, Shimadzu's independently-developed mini-torch unit offers unrivaled performance and savings. One of the highest costs associated with ICP-MS systems is the large quantity of argon gas they consume. However, Shimadzu's proprietary mini-torch plasma system consumes two-thirds the argon gas (10 L/min) as conventional plasma torches. Furthermore, during standby when Eco mode is active, the plasma gas flow and power are reduced to 5 L/min and 0.5 kW to minimize the required gas and electricity; however, analysis can be started immediately with no loss of productivity.

## Easy-to-Maintain Sample Injection System

### Cyclone Chamber Cooled by a Peltier Element

The sample injection system features an electronically-cooled cyclone chamber utilizing a highly efficient coaxial nebulizer and unique overflow drain design. This design combines highly efficient aerosol production while reducing carryover to maximize sensitivity and throughput.





# Trace Element Analysis Applications For Today's Demands

## ■ Environmental, Drinking Water, and Wastewater Analysis

Natural resources such as rivers, oceans, and soil are limited and we all share an obligation to preserve them for our future generations. In the world we live in today, we continue to place a burden on those resources through such practices as industrial manufacturing. It is essential that we preserve and protect our environment and our resources through reuse,

recycling resources and reducing pollution. These can only be accomplished through monitoring by conducting massive amounts of measurements. To this end, Shimadzu provides a simple and accurate means of measuring samples so that recycling processes and manufacturing processes can be managed properly and responsibly.

Analytical Results of River Water

Element	Japanese Water Supply Act Standard (µg/L)	EPA Max. Limit Value for Drinking Water (µg/L)	Samples: JSAC0301-3		Samples: JSAC0302-3	
			Quantitation Value	Certified Value	Quantitation Value	Certified Value
Unit: µg/L						
Al	200	200	16	15±1	66.9	66±1
As	10		0.20	0.20±0.01	5.29	5.2±0.1
B	1000		8.52	8.2±0.3	58.0	59±1
Ba	700**	2000	0.55	0.53±0.01	0.55	0.52±0.01
Cd	3	5	0.0018	0.0018 (Reference value)	0.991	1.00±0.02
Cr <sup>6+</sup>	50	100	0.17	0.16±0.01	10.0	10.0±0.2
Cu	1000	1300	0.4	0.37±0.03	10.0	9.9±0.1
Fe	300	300	6.5	6.4±0.2	58.5	58±1
Mn	50	50***	0.21	0.2±0.01	5.3	5.1±0.1
Mo	70**		0.30	0.290±0.004	0.30	0.290±0.004
Ni	10*				9.63	9.5±0.3
Pb	10	15	0.005	0.007 (Reference value)	9.68	9.9±0.2
Se			0.2	0.08 (Reference value)	4.95	5.0±0.2
Zn	1000	5000***	0.17	0.17±0.04	10.5	9.8±0.2
Unit: mg/L						
K			0.48	0.47±0.02	0.48	0.48±0.02
Na	200		4.53	4.34±0.07	4.47	4.32±0.07
Mg	Hardness: 300		3.37	3.34±0.07	3.34	3.32±0.06
Ca		250***	13.2	13.0±0.2	13.1	13.0±0.1

\*: Target setting item, \*\*: Required test item, \*\*\*: National Secondary Drinking Water Regulations

## ■ Pharmaceuticals/Pharmacopoeia

Many of the pharmaceuticals, food products, and other products we encounter can contain harmful elements, either introduced from natural sources or artificially through manufacturing processes. ICP-MS systems are able to quickly measure harmful elements with high sensitivity, making them ideal for monitoring such substances and ensuring the safety and security of pharmaceuticals, foods, and

other products. Additionally, pharmaceuticals must satisfy the allowable limits specified by ICH Q3D guidelines, where the measurement methods used are specified in the pharmacopoeia of respective countries. The system must also be compliant with quality control standards specified by the FDA and Japanese Ministry of Health, Labor and Welfare.

Analytical Results of Tablet

Element	Oral Drug PDE µg/day	Max. Allowable Concentration µg/g	Measurement Value in Tablet µg/g	Equivalent Tablet Dose DL (3 ×) µg/g	Recovery Rate %
Cd	5	0.5	N.D.	0.0005	103
Pb	5	0.5	0.009	0.0002	103
As	15	1.5	N.D.	0.006	110
Hg	30	3	N.D.	0.0002	98
Co	50	5	0.004	0.00004	100
V	100	10	N.D.	0.01	110
Ni	200	20	0.66	0.003	110
Tl	8	0.8	N.D.	0.00002	98
Au	100	10	N.D.	0.0003	104
Pd	100	10	N.D.	0.0002	99

Max. Permitted Concentration Assuming a 10 g Max. Daily Intake of Formulation (Option 1:)

## ■ Food Products/Agriculture

We rely on foods to provide necessary elements and minerals required for supporting life. However, if food contains hazardous elements, they can be harmful to our health. Therefore, analyzing food has become increasingly important in recent years for ensuring the safety of food. One example of this is powdered infant formula which is made with a healthy balance of minerals necessary for infant growth. Regulatory requirements specify the

amounts of calcium (Ca), iron (Fe), copper (Cu), and other essential minerals and while limiting hazardous elements like arsenic (As), which has detrimental effects on child development. The ICP-MS is able to quickly measure a wide variety of elements in powdered milk products and other foods, including raw ingredient and finished products.

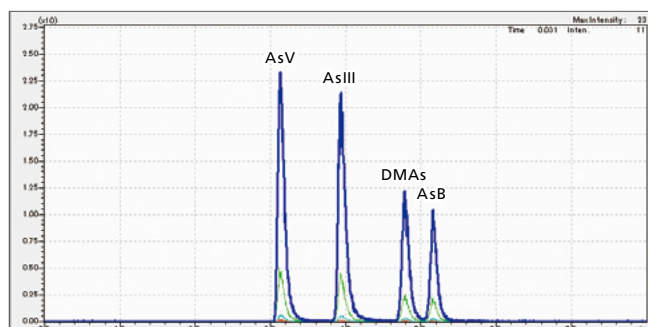
Analytical Results of Powdered Milk

	Unit	NMU Certification Value	Analytical Value (in the powder)	Detection Limit in Powder	Detection Limit in Measured Solution (DL: 3 ) µg/L
Cu	mg/kg	4.66	4.79	0.005	-
Mn		0.931	0.926	0.0002	-
Mo		0.223	0.211	0.0005	-
Sr		5.88	5.66	0.00004	-
Zn		41.3	41.5	0.003	-
Cd	µg/kg	-	N.D.	0.05	103
Cr		-	N.D.	0.3	103
Pb		-	N.D.	0.1	95
As		(2.1)	2.5	0.5	105

## LC-ICP-MS

The environment, pharmaceuticals, food and other products can contain elements in different chemical form or oxidation states. Speciation of these is sometimes required. By combining different analytical techniques like LC-ICP-MS, speciation of chemical forms can be achieved with high sensitivity. This is accomplished by connecting the ICPMS-2030 in-line with an LC (Shimadzu

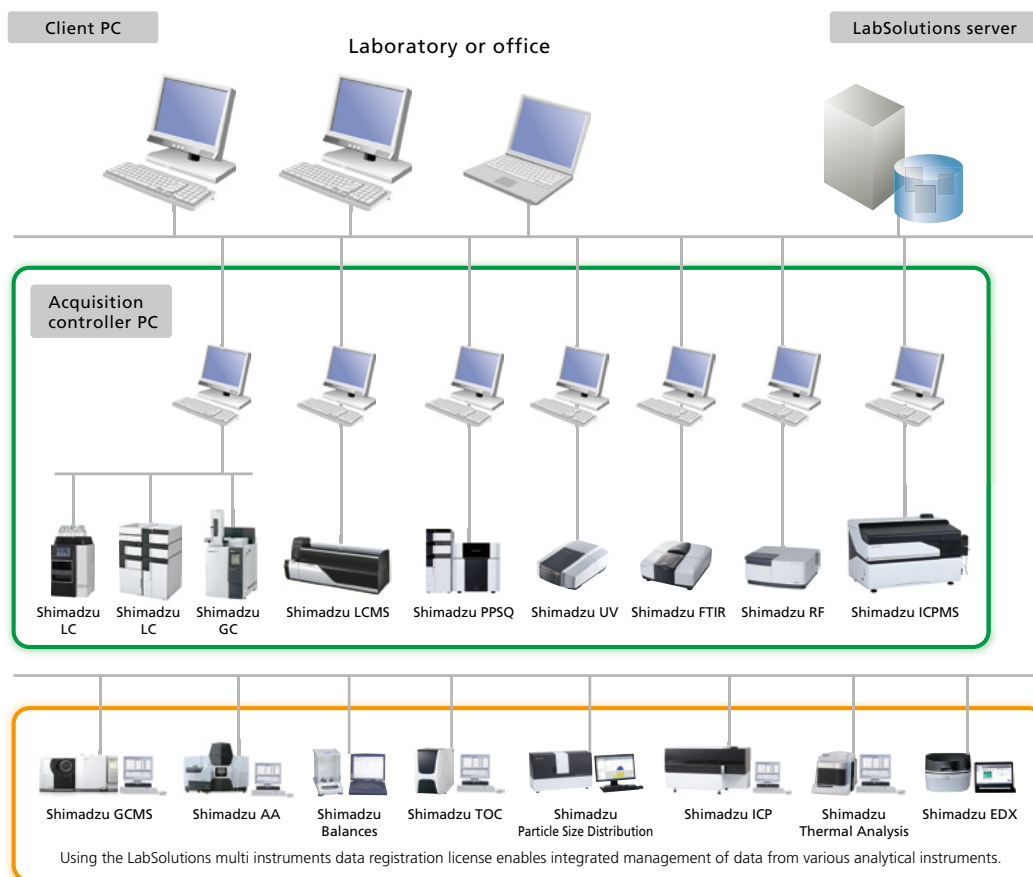
Prominence Inert LC) system. LabSolutions ICPMS TRM (time-resolved measurement) software controls the LC (Shimadzu Prominence Inert LC System) from the ICPMS-2030, allowing for one smooth platform that automatically detects and measures analyte peaks.



Arsenic Chromatogram



# LabSolutions CS/DB for ICPMS-2030 Supports Laboratory Networking and FDA 21 CFR Part 11 Compliance.



LabSolutions CS/DB ICPMS provides compliance for regulations concerning electronic record keeping and electronic signatures required by FDA 21 CFR Part 11 and other regulations stipulated by Japan's Ministry of Health, Labor and Welfare (ERES regulations). Additionally, since the software supports laboratory

networking, analytical results from a broad variety of analytical instruments used in the laboratory, including LC, LCMS, GC, GCMS, UV, FTIR, RF, EDX, TOC, and PPSQ, can be managed centrally from a server.

## Two Data Management Methods Available Depending on the System

### ■ Network System: LabSolutions CS (coming soon)

LabSolutions CS can freely access all instruments on the analytical network, so that all analytical data is managed on the network server and the data can be loaded to any computer connected to the network. This is especially recommended for customers that have many users and want to manage data on a server together with LC, GC, FTIR, UV, RF, EDX, TOC, PPSQ, and other data for ER/ES compliance.

### ■ Standalone Database System: LabSolutions DB ICPMS (option)

This configuration does not require a network connection and is ideal for customers that want to manage all data on one computer for ER/ES compliance only for a standalone system.

#### System Contents

Network system LabSolutions CS	LabSolutions ICPMS, LabSolution CS Connection Kit, LabSolutions CS
Standalone database system LabSolutions DB ICPMS	LabSolutions ICPMS, LabSolution DB Connection Kit



# Peripheral Equipment

For automatic analysis of 60 samples

## AS-10 Autosampler (P/N S211-93680-58)

Multiple samples can be analyzed successively. The turntable results in a short path length for sample injection, which can reduce the rinse time.

Vials: 60 15- mL vials  
8 50-mL vials

Size: W290 × D508 × H300 mm (excluding arm)  
Power supply: Single-phase 100 V, 50/60 Hz, 100 VA

Note: Requires separate power cord (P/N S071-60821-08).

Note: An additional rinsing port is optional (There is no automatic solvent supply).  
Rinsing Port Expansion Kit for AS-10 (P/N S211-94072-41).



For simultaneous analysis of 240 samples

## ASX-520 Autosampler (P/N S211-84476-01)

Vials:  
10 50-mL vials (standard samples) or 240 14-mL vials  
160 20-mL vials (rack sold separately)  
84 50-mL vials (rack sold separately)  
Size: W520 × D482 × H250 mm

(main unit/excluding sample probe unit)

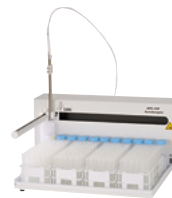
W90 × D180 × H60 mm

(rough dimensions of power supply unit)

Power supply: 100 V AC ± 10 %, 200 VA, 50/60Hz

Weight: 10.5 kg (main unit)

Note: Requires a separate connection kit (P/N S211-94010-41).



For simultaneous analysis of 120 samples

## ASX-260 Autosampler (P/N S211-84476-19)

Vials:  
10 50-mL vials (standard samples) or 120 14-mL vials  
80 20-mL vials (rack sold separately)  
42 50-mL vials (rack sold separately)  
Size: W330 × D508 × H250 mm

(main unit/excluding sample probe unit)

W90 × D180 × H60 mm

(rough dimensions of power supply unit)

Power supply: 100 V AC ± 10 %, 200 VA, 50/60Hz

Weight: 8.4 kg (main unit)

Note: Requires a separate connection kit (P/N S211-94010-41).



## LC Connection Kit (P/N S228-62531-41)

This kit is used to connect ICPMS to an LC system (Prominence inert LC System).

Note: Requires LabSolutions ICPMS TRM (software) (P/N S211-49200-91) for LC Connection Kit

## Automatic Internal Standard Addition Kit (P/N S211-93150-41)

This kit is used for in-line mixing of measurement sample and internal standard solutions and introducing the mixtures into the ICP system.

## HFS-5 Hydrofluoric Acid Sample Injection System (P/N S211-93828-41)

This system includes a torch, chamber, extension tube, nebulizer, drain, and their corresponding accessory parts.

If purchasing a new system, order this kit and an S2 orifice assembly.

Used to directly inject samples that contain hydrofluoric acid. The nebulizer, chamber, and drain system are made using fluoropolymer materials and the injector unit on the torch is made using alumina.

For high-sensitivity analysis of As, Se, and Sb

## HVG-1 Hydride Generator (P/N S206-17143-41)

This unit uses nascent hydrogen generated from decomposition of sodium borohydride to vaporize elements in samples by reduction and then introduce only the gas phase into the plasma. This enables measurements with about 50 times higher sensitivity.

Note: Requires a separate HVG-ICPMS connection kit (P/N S211-93243-41) and liquid waste pump (P/N S042-00412-01)



## Organic Solvent Injection System (P/N S211-92618-41)

To introduce organic solvents, a mixture of argon and oxygen gases (70% Ar and 30% O<sub>2</sub>) is injected into the interface unit to prevent precipitation of carbon (C) by the organic solvent. This system includes a Quadruple Torch for Organic Solvents, ICPMS, drain, and their corresponding accessory parts.

## Cooling Water Circulator Set (P/N S211-92962-41)

Size: W377 × D500 × H615 mm  
Power supply: Single-phase 200 V, 50/60 Hz, 2 kVA  
Weight: 43 kg

Note: Used to cool the main unit.

Note: Requires a separate chiller connection kit (P/N S211-93827-41).

Note: Requires tetoron braided hoses (P/N S018-31509) for coolant water supply and drain.

Order in meter units for the overall length.



## Laser Ablation Connection Kit (P/N S211-93829-41)

This connection kit is compatible with ESI NWR-213 laser ablation systems.

## Tap Water Connection Kit (P/N S211-90558-41)

This is required if using tap water to cool the main ICPMS-2030 unit.






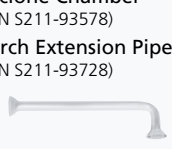



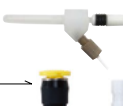



Note: Requires a separate coupler set (P/N S035-60942) for tap water connection.

## Exhaust Duct Connection Adapter (P/N S211-93832-41)

## Noise Reduction Box for Rotary Pumps (P/N S225-27850-06)

Note: Requires Noise Reduction Box Connection Kit (P/N S211-93825-41) for Noise Reduction Box for Rotary Pumps.

# Accessories

	Standard Set	For Organic Solvents	For Hydrofluoric Acid Resistance
Examples of Samples	Environmental water, effluent water, water with dissolved pharmaceutical or food substances, or other acid decomposition solutions	Organic solvents	Solutions with residual hydrofluoric acid
Torches	<b>Mini Torch, ICPMS</b> (P/N S211-94018) <b>Shield Screen</b> (P/N S211-93819) 	<b>Quadruple Torch for Organic Solvents, ICPMS</b> (P/N S211-94021-41) <b>Bonnet for Organic Solvents</b> (P/N S211-94047) <b>Torch Adapter for Organic Solvents</b> (P/N S211-93780-41) <b>Shield Screen for Organic Solvents</b> (P/N S211-93820) 	<b>Demountable Torch, ICPMS</b> (P/N S211-94095-41) 
Interfaces	<b>Sampling Nozzle, Copper</b> (P/N S211-90190-41) →  <b>Skimmer Cone, Copper</b> (P/N S211-90200-41) → 		
Chambers	<b>Cyclone Chamber</b> (P/N S211-93578) <b>Torch Extension Pipe</b> (P/N S211-93728)  <ul style="list-style-type: none"> <li>• Locking Screw, 0152 (P/N S046-00093-92)</li> <li>• Seal, 0237 (P/N S046-00092-93)</li> </ul> Includes the above.		<b>PFA Cyclone Chamber</b> (P/N S211-93579) →  <b>Torch Extension Pipe, HFS</b> (P/N S211-94097) →  <b>Clamp</b> (P/N S037-60091-03)
Nebulizers	<b>Nebulizer, 07UES</b> (P/N S046-00092-01)  <ul style="list-style-type: none"> <li>• Suction tube assembly, NFTA-075 (P/N S046-00092-18)</li> <li>• Connector, QSM (P/N S046-00092-09)</li> <li>• Tube adapter, 0735 (P/N S046-00092-10)</li> <li>• Clamp, SNP-1 (P/N S037-6113-01)</li> </ul> Includes the above.		<b>Nebulizer, PFA15</b> (P/N S046-00092-17)  <ul style="list-style-type: none"> <li>• Suction tube assembly, NFTA-075 (P/N S046-00092-18)</li> <li>• Connector, QSM (P/N S046-00092-09)</li> <li>• Tube adapter, 0735 (P/N S046-00092-10)</li> <li>• Clamp, SNP-1 (P/N S037-6113-01)</li> </ul> Includes the above.
Drains	<b>Drain Trap, 8214</b> (P/N S046-00093-01) 	<b>Drain Trap for Organic Solvents</b> (P/N S211-93814-01) 	<b>Hydrofluoric Acid Resistant Drain</b> (P/N S046-00093-06) 
Peristaltic Pump Tubes	<b>Peristaltic Pump Tube</b> (P/N S018-31558-44)	<b>Peristaltic Pump Tube for Organic Solvents</b> (P/N S018-31558-61)	<b>Peristaltic Pump Tube</b> (P/N S018-31558-44)
Others		<b>Organic Solvent System</b> (P/N S211-92618-41) This system includes a Quadruple Torch for Organic Solvents, ICPMS, drain, and their corresponding accessory parts.	<b>Hydrofluoric Acid Sample Injection System</b> (P/N S211-93828-41) This system includes a torch, chamber, extension tube, nebulizer, drain, and their corresponding accessory parts.

## Specifications

ICPMS-2030	
Plasma Ion Source	
Sample Spray Chamber	Cyclone chamber (electronically cooled)
Peristaltic Pump	4 ch
Plasma Torch	Mini torch
Nebulizer	Coaxial
Torch Positioning	X, Y, and Z automatic 3-axis positioning
High-Frequency Power Supply Unit	
Frequency	27 MHz
High-Frequency Output	Max 1.4 kW $\pm$ 0.3%
Mass Spectrometer Unit	
Mass Spectrometer	Quadrupole mass spectrometer
Mass Number Range	5 to 260
Collision Cell	
Octopole collision cell Gas used: Helium gas at 0 to 10 mL/min	
Detector	Electron multiplier
Vacuum System	3-stage differential pumping

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 Note: The ® symbol is omitted in this document.

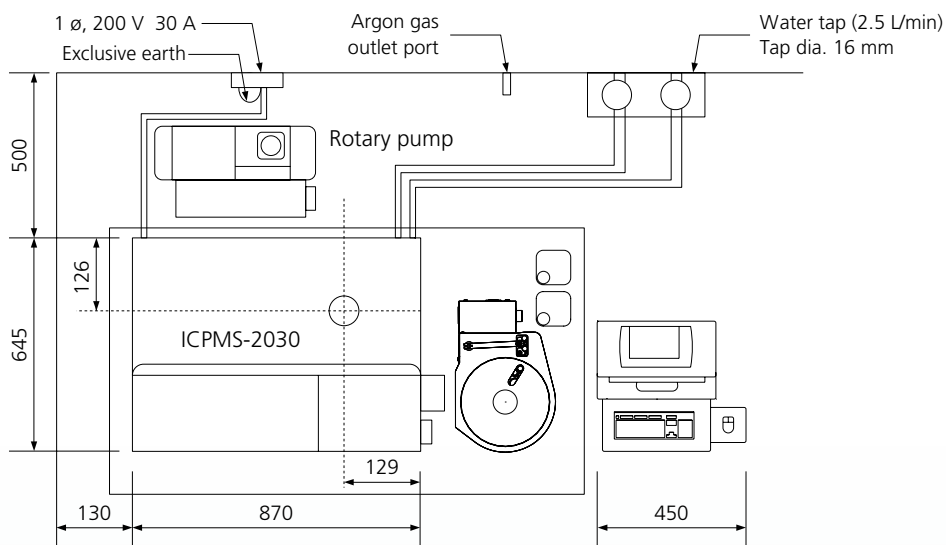
## Installation Requirements

1. Installation Site Environment	Temperature within 18 to 28°C (max. 2°C/h temperature change)	
	Humidity within 20 to 70% RH	
	Avoid using the system in locations with significant vibration or dust.	
2. Power Supply	Main Unit	Single-phase 200 to 240 V $\pm$ 10 %, 50/60 Hz, 6 kVA
	Data Processing	Single-phase 100 V $\pm$ 10 %, 50/60 Hz, 200 VA
	Options	
	Laser Printer	Single-phase 100 V $\pm$ 10 %, 50/60 Hz, 900 VA
3. Grounding	Cooling Water Circulator	Single-phase 200 to 230 V, 50/60 Hz, 2 kVA
	Should be grounded independently with a maximum resistance of 30.	
4. Gas Supply	Type:	
	Argon gas with 99.95% purity	
	Helium gas with 99.999% purity	
	Adjust the argon gas supply pressure to 450 $\pm$ 10 kPa. For 7 m <sup>3</sup> gas cylinders, one cylinder is required approximately every ten hours of operation. Adjust the helium gas supply pressure to 250 $\pm$ 10 kPa.	
5. Cooling Water	Main unit cooling water temperature 5 to 30 °C	
	and minimum flow rate of 1 L/min	
6. Exhaust Duct	Exhaust gas from the plasma stand is mostly argon, but also includes some metal vapors and solvent. Therefore, install exhaust ducting.	
7. Application for Permit	In Japan, installing an ICPMS-2030 system requires applying for a permit for using high-frequency radio waves, based on the Radio Wave Control Law.	
8. Weight	140 kg	

Note: Refer to the installation guidelines for more details.

## Installation Example

(Unit : mm)





Determined to Deliver Quality Service

# Shimadzu Service Agreement Programs



At Shimadzu Scientific Instruments, our goal is to not only find the best solutions for research, development and applications to meet your specific disciplinary needs, but to ensure the products you purchase remain in optimum working condition. Shimadzu's premium levels of service are your best value. We now offer five levels of service coverage customized for your laboratory's needs.

	Premium Total Coverage	Extended Warranty Plus	Premium PM	PM	Extended Warranty
Service performed by certified Shimadzu Service Engineer	✓	✓	✓	✓	✓
Unlimited Hardware phone support	✓	✓	✓	✓	✓
Unlimited Software phone support	✓	✓	✓	✓	✓
Response time prioritized over billable call	✓	✓	✓	✓	✓
On-demand service visit	✓	✓			✓
On-site service includes labor, travel, parts	✓	✓	✓ (for PM visit)	✓ (for PM visit)	✓
Includes annual PM service visit	✓	✓	✓	✓	
Includes consumable parts needed during PM service visit	✓	✓	✓		
Includes Turbo Pump coverage for MS	✓	✓	✓		
Scheduled minor software & firmware upgrades	✓	✓			
Includes consumable parts used on service visit outside of PM	✓				
Rebate provided	✓				
Age premium is waived	✓				

## Service Agreement Option Descriptions

### **PM (Preventative Maintenance)**

Preventative Maintenance is the most basic maintenance option using only the most integral consumable parts needed to bring the system back to a functioning unit. This may include necessary cleaning, adjustments, verification, lubrication, consumable parts replacement and testing to return the instrument to a functional unit.

### **Premium PM**

Premium Preventative Maintenance is a higher-level PM than the previously listed. The Premium PM contains all the standard consumables found in the PM; however, it can contain additional consumable parts or testing deemed necessary to bring the system back to the manufacturer's operational specification.

### **Extended Warranty**

Extended Warranty is a repair option. This coverage level DOES NOT include the replacement of any consumable parts. It is intended for the use of repair/replacement of any mechanical, electrical or electromechanical parts not due to customer misuse. All time and materials (excluding consumables) will be covered.

### **Extended Warranty Plus**

Extended Warranty Plus coverage includes both the Premium PM and Extended Warranty. Customers will receive one (1) Premium PM per calendar year as well as the replacement of any mechanical, electrical or electromechanical parts due to hardware failure.

### **Premium Total Coverage**

Premium Total Coverage is 100% full and total coverage of the customer's system. The customer's problems are covered no matter what the issue. Coverage level still guarantees one (1) Premium PM as well as the replacement of any additional (consumables, mechanical, electrical and electromechanical) parts at no additional charge to the customer. If at the end of the year the customer has only used their one Premium PM and two additional service repair visits, customer will be given a REBATE to be used towards the purchase of additional Shimadzu service products.

## Below is a representative listing of Premium PM Procedures.

### GCMS-2010

- Clean Ion Source Box, Repeller and Ceramics or replace with comparable part.
- Clean Lens stack and Ceramics.
- Clean Pre-Rods.
- Replace Filaments.
- Perform injector AFC leak check per service manual and repair any leaks.
- Replace Injection Port O-ring and Glass Insert.
- Replace Injection Port Septum.
- Replace carrier gas filters.
- Replace Column Ferrules if column has been removed.
- Perform Vacuum Leak Check per SOP. Repair any vacuum leaks due to consumable parts.
- Change Oil for Rotary Vacuum Pump.
- Check Run Time for Turbo Pump.
- Reset Consumable counters in the software.
- Check helium purifier: check the installation date and how many tanks have been used since the purifier was installed; if more than four tanks were used, Replace.
- Check response for Standard Sample per SOP.

### LCMS-2020

- Replace Oil in Rough Pump
- Refurbish ESI Probe
- Clean Spray Chamber
- Replace DL pipe Assy.
- Inspect and clean Oil Mist Filter
- Refurbish APCI Probe
- Inspect and replace damaged O-rings
- Inspect oil mist filter , replace oil element
- Remove and clean Orifice
- Remove and clean Q-Array
- Remove and clean Skimmer
- Remove and clean Octapole assembly
- Adjust RF power supplies
- Adjust rough pump ballast
- Autotune and calibration
- Evaluate performance with standard sample

### MALDI/AXIMA

- Lubrication of Stage lead screws
- Clean and rebuild Lens Assy
- Cleaning of Delay Plate
- Rough Pump oil change
- Activated Aluminum replacement
- Silica Gel exchange
- Inline filter replacement
- Camera Lamp replacement
- Replace 10Meg resistor ( if applicable )
- Cooling fan inspection, lower unit
- Cooling fan inspection, Transient Recorder
- Cleaning and duct removal
- Tuning and calibration
- Performance evaluation with standard sample

### Nexera UHPLC LC-30AD

- Clean pump heads
- Replace plunger seals
- Replace rinse diaphragms
- Inspect/replace plungers
- Replace line filter
- Replace suction filters
- Replace inlet and outlet check valves
- Inspect/replace drain valve assembly
- Lubricate oil pads, cams and cam followers
- Remove dust from fan and electronics
- Verify stored function parameters and ROM version
- Perform flow rate check

### TOC-V & L Series

- Replace TC Combustion Tube and Catalyst
- Replace all O-Rings on TC and IC Injection Assemblies and Test
- Replace Syringe
- Inspect Syringe Drive Assembly
- Replace Eight Port Valve
- Replace Halogen Scrubber
- Replace TC and IC injection tubing
- Inspect all Tubing
- Inspect and Clean all Glassware
- Inspect and Clean Humidifier and Drain Vessel
- Replace IC Reaction Pump Head
- Check Flow Rate and Pressure
- Check Baseline Position
- Replace Dilution Water, Acid
- Perform Calibration Curve with Standards



**GCMS Vacuum System Covered**  
**(Turbo & Roughing Pump)**

**Built-In Discount on Parts & Labor vs.**  
**Time & Material Billable Calls**

**System Certification Can Be**  
**Purchased with PPM**

**Priority Service for Service**  
**Agreement Customers**

Travel Charge: Flat rate on maintenance plans.

Time & Material PM Travel is actual travel billed at \$280/hr. from the nearest service center.



Our commitment is to provide you with the **best** instrumentation and **highest quality service** in the industry. In line with that commitment, your instrumentation will be serviced by **certified factory-trained** Shimadzu employees utilizing N.I.S.T. certified test equipment where applicable.

Purchasing a Shimadzu Service Agreement will ensure you are receiving the best service for your Shimadzu instrumentation at the best price. For more information or to request a quote, please contact your regional office.

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## ICPMS-2030 Site Preparation Checklist

**ACTION REQUIRED** ■ PLEASE READ CAREFULLY AND RETURN REQUESTED INFORMATION PROMPTLY.

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## Introduction

**Purpose:** Shimadzu strives to assure that your new instrumentation is installed successfully the first time. This document contains important information regarding the utilities, consumables, and supplies required to achieve this goal.

**Customer Responsibilities:** To provide all necessary conditions and make available all supplies and consumables required for the successful and prompt installation of your Shimadzu instrumentation. You are not responsible for performing an inventory of shipped items; a Shimadzu representative will complete this task at the time of installation. However, please review your sales order for accuracy and contact Shimadzu immediately if you believe there are any errors.

If you would like additional assistance, please contact our Technical Support Department in Columbia, MD (1-800-477-1227). Assistance with applications or Method transfer can be requested separately.

**Note:** This document does not replace the actual instrument manuals in any way.

## Computers “Transfer of Ownership”

If a Dell Computer was purchased from Shimadzu, you are responsible for transferring the ownership of the computer from Shimadzu to you or your company, as Dell initially registers all data stations to Shimadzu. This is required by Dell to receive full support and service for your computer. Please use following link to perform the transfer:

[http://support.dell.com/support/topics/global.aspx/support/change\\_order/tag\\_transfer](http://support.dell.com/support/topics/global.aspx/support/change_order/tag_transfer)

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**Please read the whole document, put your initials in each line, sign, date and return this page by fax to the local Shimadzu office at: 410-290-5123 or email [jffeathers@shimadzu.com](mailto:jffeathers@shimadzu.com)**

\_\_\_\_\_ Sales Order is Accurate. Sales Order Number: \_\_\_\_\_.

\_\_\_\_\_ All required environmental conditions as in this document are met by the installation site.

\_\_\_\_\_ All requirements for power, bench space and weight bearing are met by the installation site.

\_\_\_\_\_ All supplies and consumables such as gases, chemicals, exhausts, waste containers and disposal, etc., as listed in this document will be furnished by the end user at the time of the installation.

---

Customer Name

---

Signature

---

Date



## Site Entrance (Training) Requirements

Customer is responsible to communicate, coordinate and advice on any training needed in order to enter the installation site premises.

## Installation Environment

### I. Ambient Conditions

#### 1. Temperature

18 to 28°C; must be stable, less than  $\pm 2^{\circ}\text{C}/\text{hour}$  fluctuation

#### 2. Humidity

20% to 70% (no condensation)

#### 3. Other Considerations

##### a. Vibrations

The installation area should be free of excessive vibrations.

##### b. Corrosive Environment

Select an installation site that is free from corrosive or organic gases and dusts.

##### c. Dust

Excessive dust could result in damage to the instrument.

##### d. Site Entrance Requirements - Space needed to maneuver the instrument into the Lab.

Clearances of at least 42" are required to position the instrument, as per the dimensions. Due to the excessive weight of the instrument a means of transportation and placement onto the workbench, such as a forklift, should be provided by the customer.

##### e. Others

Do not install this equipment where the use of fire is prohibited or where there is exposure to direct sun light. The ICPMS-2030 should be installed on a **sturdy** level surface, which is capable of supporting 140kg and is conveniently located near a grounded power source of the appropriate voltage, with room for service around the instrument. Do not install the instrument in the vicinity of strong magnetic or electric fields, heat sources or drafts from air-conditioners.

## Installation Site

### I. Size, Weight, and Power Requirements

Please refer to [Appendix A](#) for Power Plug NEMA types.

Purchased?	Instrument Module Name	Module Qty.	Size (Width x Depth x Height) in millimeters and Weight (lbs.)	Circuit Requirements Voltage and Tolerance, Frequency (Hz), NEMA nomenclature	NEMA Type	Outlet Qty.
<input type="checkbox"/>	ICPMS-2030	1	870mm Width x 645mm Depth x 587mm Height 140 kg (308 lbs.). A table that supports this weight must be provided. <b>Using professional riggers is recommended for placement of ICPMS-2030</b>	Spectrometer 200~240 volts (+/- 10%) but not to exceed 250 volts, 60 Hz, 30 amps single phase  Ground resistance must be 30 ohms or less. If possible provide an independent ground of 10 ohms or less. <b>Customer needs to provide and install both the plug and the receptacle.</b>	L6-30  Plug and receptacle	1
<input type="checkbox"/>	Shimadzu Sold Computer	1	447 W,173 D,467 H  39 lbs.	120 VAC 50/60 Hz	5-15R	2
<input type="checkbox"/>	Shimadzu Sold Printer	1	Depend on printer type. Normally 3 Square feet will be sufficient.	Normally 120VAC 50/60HZ	5-15R	1



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<input type="checkbox"/>	AS-10		290 W,508 D,300 H 25lbs	100-240 VAC +/- 10 % 50/60 Hz	5-15R	1
<input type="checkbox"/>	ASX-260		90 W,180 D,60 H 19lbs	100-240 VAC +/- 10% 50/60 Hz	5-15R	
<input type="checkbox"/>	ASX-520		520 W,482 D, 250 H 23lbs	100-240 VAC +/- 10% 50/60 Hz	5-15R	
<input type="checkbox"/>	Shimadzu sold chiller		377 W,500 D,615 H 95lbs	200 VAC 50/60 HZ <b>Customer needs to provide and install both the plug and the receptacle.</b>	6-15 Plug and receptacle	1
	<b>Totals:</b>		Calculate Total Space and Weight: ___ x ___ x ____ Weight: _____	Proper power supply should be checked or confirmed by an electrician.	Calculate total power plugs by type: _____	



## 1. Installation Site Notes:

A power strip is recommended in cases where 3 or more NEMA 5-15R power plugs will be used.

## Coolant Water

The ICPMS-2030 spectrometer requires coolant water (If no cooling chiller).

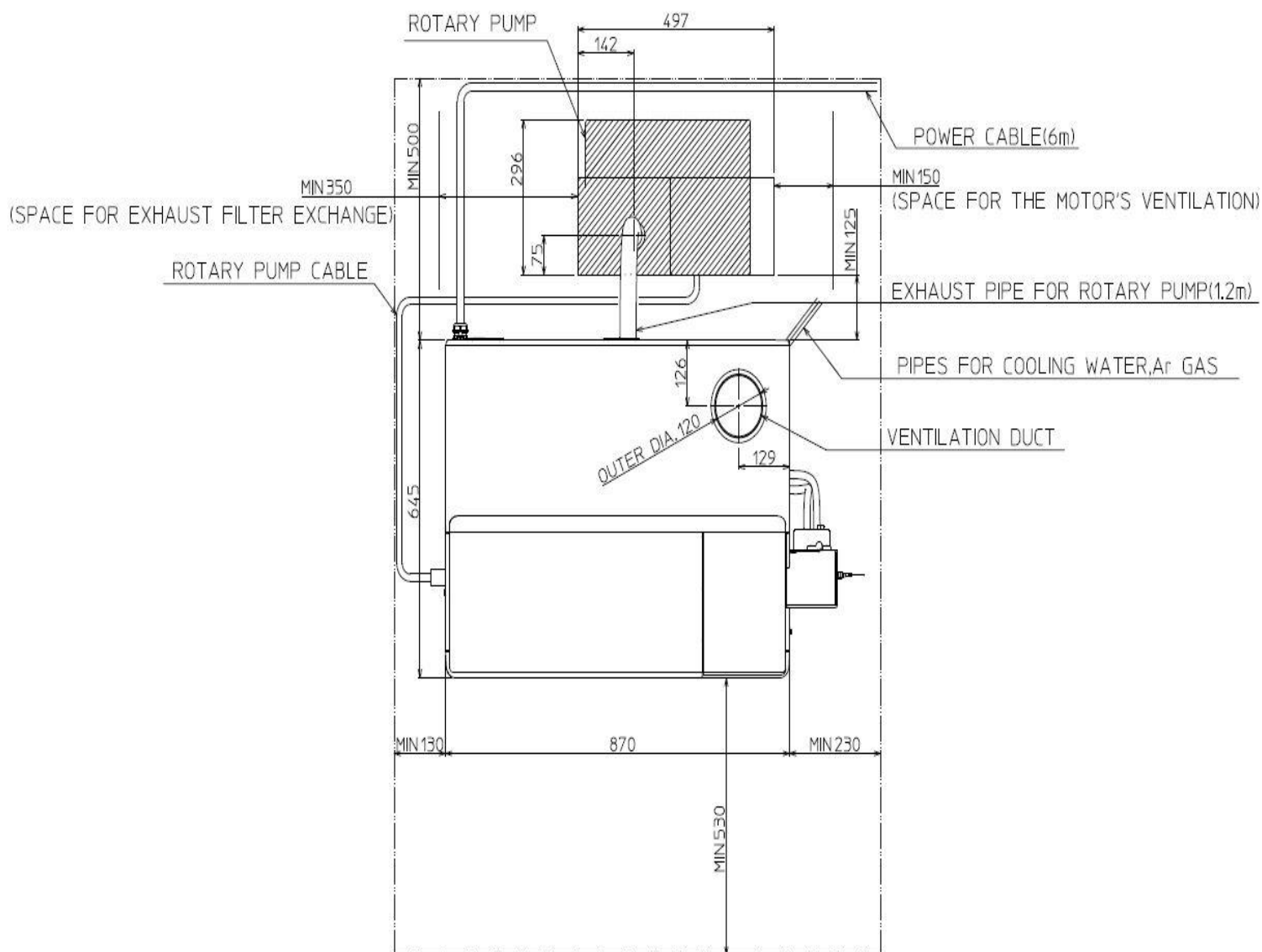
### Plasma Stand Coolant Water

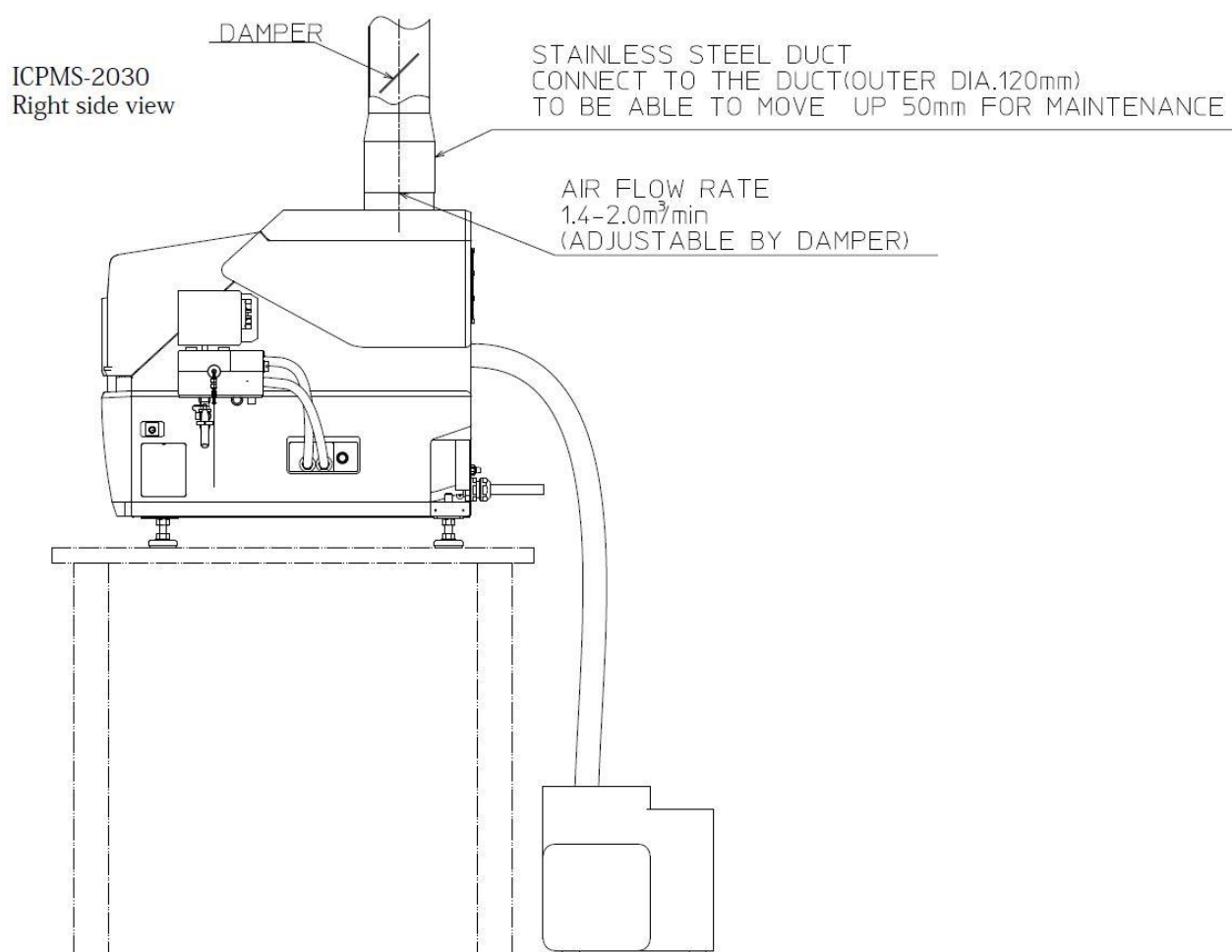
Provide the following options according to operating conditions.

Operating Conditions		Required Options	Specifications of Option, etc.
Public Water Supply Water Temp: 5 to 30°C Water Pressure: 150~300kpa	Each round trip coolant water hose length is 10 meters or less.	Tap water piping Kit (P/N211-90558-41)	(1) For unthreaded 13 mm nominal diameter faucet connections. If not applicable, provide connection hardware for 12 mm ID, 18 mm OD Tetron braided hose. (2) Includes pressure reducer and filter
	If coolant water hose exceeds length above order 018-31509-00 in meter units for overall length.	Tap water piping kit (P/N211-90558-41)  Coolant water supply and drain hoses (P/N 018-31509-00)	(1) See above regarding public water system connection kit (2) Tetron braided hose with 9 mm ID and 15 mm OD is used for coolant water supply and drain hoses. (3) Order total length of coolant water supply and drain hoses in meter increments.
If Using a Coolant Water Recirculation System	If connecting only the ICPMS-2030 system	HRS018 Cooling water circulator (P/N211-92962-41)  HRS018 connection kit (P/N 211-92884-41)	(1) Provide a 200-230 V AC (50 or 60 Hz) 10 A power supply for cooling water circulator.

## 2. Site Layout Picture or Drawing

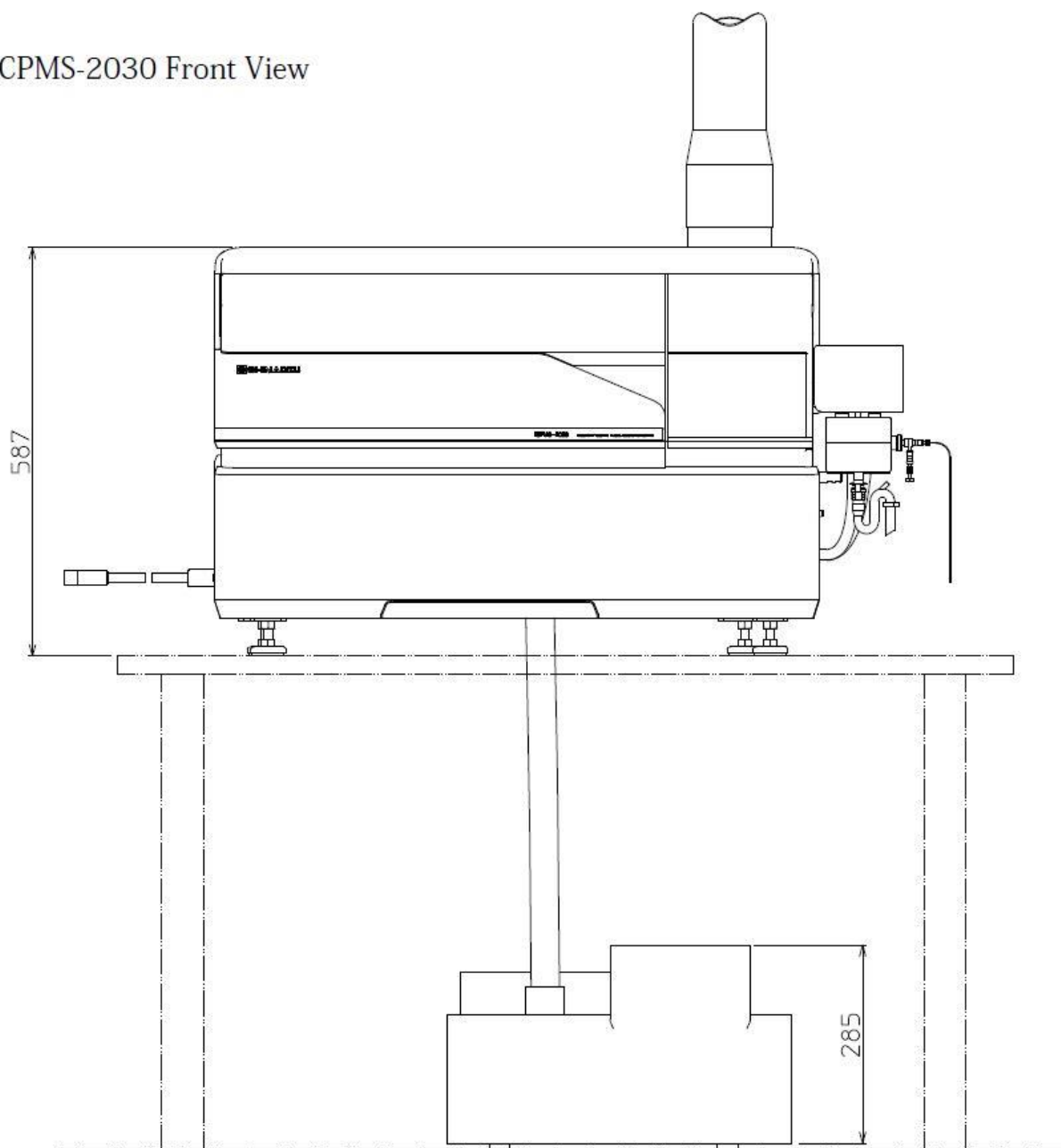
ICPMS-2030 Top view







ICPMS-2030 Front View



### 3. Waste / HAZMAT Management

**a. MSDS**

Provided in manual

**b. Liquid waste pot**

A corrosion resistant 1.0 - 2.5 gallon waste collection vessel is required.

**c. Exhausts, ducts, or other evacuation systems**

Installation of the ICP is not possible without proper exhaust. A ventilation hood **must** be installed above the instrument with damper. The ventilation of plasma torch section should have a flow rate of 1.4 to 2.0 m<sup>3</sup>/min. Locate the system outlet such that the exhaust cannot re-enter the building through any door, window, air conditioning inlet, or other ventilator. See page 6 for diagram.

**d. Other waste management instructions**

Disposal of waste in accordance with local standard operation procedures

## Gas Requirements

Gas Name CGA Fitting	Purity	Recommended Pressure	Notes
Argon CGA 580	99.95% or better	450 kPa +/- 10 kPa	Note: An "A" type gas cylinder will last <b>approximately 8 hours under normal</b> use. A liquid type Dewar is highly recommended.  All tanks, fittings, and tubing provided will be in place, properly secured and will have been leak checked prior to instrument installation. It is recommended that all lines have a pressure gauge and shut off valve between the gas lines and the hoses of the instrument. This is a safety precaution.
Helium CGA 580	99.999% or better	150 kPa +/- 20 kPa	

## Instrument Test Materials

### 1. Solvents

Water

### 2. Glassware

Volumetric Flasks and pipettes to prepare standards and samples

### 3. Others

Standards of metals in ppb range






## Computer Requirements:

The PC used for data processing with the ICPMS-2030 must satisfy the following specifications.

- |                       |   |
|-----------------------|---|
| 1) CPU                | Intel® Core i5-4570 3.2GHz or better                        |
| 2) RAM                | 4 Gbytes or more  |
| 3) HDD                | 80GB minimum  |
| 4) CD-ROM             | 1 minimum   |
| 5) Display Resolution | 1,920 × 1,080 dots minimum (21" monitor highly recommended) |
| 6) OS                 | Windows 7 Professional 64bit                                |
| 7) LAN interface      | 1000 BASE-T /100 BASE-TX / 10 BASE-T                        |
| 8) Mouse              |   |
| 9) Printer            | Page printer compatible Windows 7                           |



## Appendix A – Power Plug Reference Chart

NEMA Nomenclature	Working Voltage Max Current	Plug Picture	Receptacle Picture
5-15R	120 VAC 15 Amp	N/A	
5-20R	120 VAC 20 Amp	Plug normally supplied and already installed in the instrument. Otherwise customer is responsible to install it.	
5 -15R Multi Plug  Normally used for computer and its peripherals.	120 VAC 15 Amp ( <u>Total</u> )	Please have one of this available.	
<b>6-15R &amp; L6-15P</b> Customer must supply and install both plug and receptacle.  (for chiller option)	230 VAC 15 Amp		
<b>L6-30R &amp; L6-30P</b> Customer must supply and install both plug and receptacle.	230 VAC 30 Amp	