



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](http://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](http://WVPurchasing.gov) with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

## Header @ 4

## General Information

Contact

Default Values

Discount

Document Information

Procurement Folder: 699504

SO Doc Code: CRFQ

Procurement Type: Central Purchase Order

SO Dept: 0619

Vendor ID: 000000184243

SO Doc ID: FIC2000000005

Legal Name: FASTENAL CO

Published Date: 3/9/20

Alias/DBA:

Close Date: 3/19/20

Total Bid: \$23,688.00

Close Time: 13:30

Response Date: 03/18/2020

Status: Closed

Response Time: 15:36

Solicitation Description: Electronic Hydrocarbon Detection Devices

Total of Header Attachments: 4

Total of All Attachments: 4



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

**State of West Virginia  
 Solicitation Response**

**Proc Folder :** 699504  
**Solicitation Description :** Electronic Hydrocarbon Detection Devices  
**Proc Type :** Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2020-03-19 13:30:00	SR      0619 ESR03122000000005247	1

<b>VENDOR</b>
000000184243 FASTENAL CO

**Solicitation Number:** CRFQ 0619 FIC2000000005

**Total Bid :** \$23,688.00      **Response Date:** 2020-03-18      **Response Time:** 15:36:50

**Comments:**      Item will ship from the manufacturer in 8 weeks or 56 days. There is a 25% restocking fee if you order these items and they need to be returned for any reason other than being damaged.

**FOR INFORMATION CONTACT THE BUYER**  
 John W Estep  
 (304) 558-7839  
 john.w.estep@wv.gov

<b>Signature on File</b>	<b>FEIN #</b>	<b>DATE</b>
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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	ELECTRONIC HYDROCARBON DETECTION DEVICES	12.00000	EA	\$1,974.000000	\$23,688.00

Comm Code	Manufacturer	Specification	Model #
77121505			

<b>Extended Description :</b>	ELECTRONIC HYDROCARBON DETECTION DEVICES
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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: 604304

Doc Description: Open-End Contract for Multi-Gas Detector Sensors

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-07-16	2019-07-30 13:30:00	CRFQ 0314 HST2000000002	1

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

**FOR INFORMATION CONTACT THE BUYER**

Linda B Harper  
 (304) 558-0468  
 linda.b.harper@wv.gov

Signature X

FEIN #

DATE

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

**ADDITIONAL INFORMATION:**

The West Virginia Purchasing Division for the Agency, West Virginia Office of Miner's Health, Safety and Training is soliciting bids from qualified vendors to establish an "Open-End" contract for the purchase of Industrial Scientific Corporation Multi-Gas detector (MX- 6 and MX-4) Sensors, or equal per the Specifications, Terms & Conditions and bid requirements as attached.

INVOICE TO		SHIP TO	
ACCOUNTS PAYABLE		OFFICE OF MINERS HEALTH, SAFETY, AND TRAINING	
OFFICE OF MINERS HEALTH SAFETY AND TRAINING		STE 2	
1900 KANAWHA BLVD EAST		7 PLAYERS CLUB DR	
BLDG. 3 SUITE 600		CHARLESTON	WV 25311
CHARLESTON	WV25305		
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Gas Detectors	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
46171613			

**Extended Description :**

Vendors Submitting Bids through wvOasis, enter total bid amount from the Exhibit A Pricing Page and attach the Exhibit A Pricing Page to your bid submittal.

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Question Deadline 4:00 p.m.	2019-07-23

## **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 **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: **Tuesday, July 23, 2019, 4:00 p.m.**

Submit Questions to: **Linda B. Harper, Buyer Supervisor**  
2019 Washington Street, East  
Charleston, WV 25305  
Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)  
Email: [Linda.B.Harper@wv.gov](mailto:Linda.B.Harper@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:** Open-End Contract for Multi-Gas Detector Sensors  
**BUYER:** Linda B. Harper, Buyer Supervisor  
**SOLICITATION NO.:** CRFQ HST2000000002  
**BID OPENING DATE:** Tuesday, July 30, 2019  
**BID OPENING TIME:** 1:30 p.m.  
**FAX NUMBER:** 304-558-3970



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:** Tuesday, July 30, 2019, 1:30 p.m.

**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. ALTERNATE MODEL OR BRAND:** Unless the box below is checked, 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.

This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

**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 be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and should include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at:

<http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf>.

**15A. RECIPROCAL PREFERENCE:** The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. A request form to help facilitate the request can be found at:

<http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf>.

**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.

**22. INTERESTED PARTY DISCLOSURE:** West Virginia Code § 6D-1-2 requires that the vendor submit to the Purchasing Division a disclosure of interested parties to the contract for all contracts with an actual or estimated value of at least \$1 Million. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission prior to contract award. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**23. WITH THE BID REQUIREMENTS:** In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.6. This authority does not apply to instances where state law mandates receipt with the bid.

## **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:** **Initial Contract Term:** This Contract becomes effective on Upon award and extends for a period of One (1) 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 delivered to the Agency and then 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. Unless otherwise specified below, renewal of this Contract is limited to Three (3) successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Alternate Renewal Term** – This contract may be renewed for \_\_\_\_\_ successive \_\_\_\_\_ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**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 of the work covered by the preceding sentence, the vendor agrees that maintenance, monitoring, or warranty services will be provided for \_\_\_\_\_ year(s) thereafter.

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

**Other:** See attached.

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

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

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

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

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

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

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

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

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

**PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

**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 of the General Terms and Conditions entitled Licensing, 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 and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, 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, including but not limited to, policy cancelation, policy reduction, or change in insurers. 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: 1,000,000 per occurrence.

**Automobile Liability Insurance** in at least an amount of: \_\_\_\_\_ per occurrence.

**Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: \_\_\_\_\_ per occurrence.

**Commercial Crime and Third Party Fidelity Insurance** in an amount of: \_\_\_\_\_ per occurrence.

**Cyber Liability Insurance** in an amount of: \_\_\_\_\_ per occurrence.

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

**Pollution Insurance** in an amount of: \_\_\_\_\_ per occurrence.

**Aircraft Liability** in an amount of: \_\_\_\_\_ per occurrence.

Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

**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. [Reserved]**

**11. LIQUIDATED DAMAGES:** 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. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

N/A \_\_\_\_\_ for N/A \_\_\_\_\_

Liquidated Damages Contained in the Specifications

**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. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

**14. PAYMENT IN ARREARS:** 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. PAYMENT METHODS:** Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

**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 § 148-1-5.2.b.

**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 WITH LAWS:** 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.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**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.

**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.

**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. 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>.

**31. 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.

**32. 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. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. 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.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**33. 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.

**34. 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.

**35. 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.

**36. 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.



**37. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.

**38. 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”), provided that both the Other Government Entity and the Vendor agree. 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. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

**39. 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.

**40. 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).

**41. 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.

Revised 06/05/2019

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

**42. 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.

**43. 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.

**44. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE:** W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**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)

\_\_\_\_\_  
(Printed Name and Title)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Phone Number) / (Fax Number)

\_\_\_\_\_  
(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.

\_\_\_\_\_  
(Company)

\_\_\_\_\_  
(Authorized Signature) (Representative Name, Title)

\_\_\_\_\_  
(Printed Name and Title of Authorized Representative)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM  
SOLICITATION NO.:**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

*(Check the box next to each addendum received)*

- |   |  |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

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Company

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Authorized Signature

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Date

**NOTE:** This addendum acknowledgment should be submitted with the bid to expedite document processing.

REQUEST FOR QUOTATION  
Multi- Gas Detector Sensors

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**SPECIFICATIONS**

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Office of Miner's Health, Safety and Training to establish an open-end contract for Industrial Scientific Corporation Multi-Gas detector (MX- 6 and MX-4) Sensors.
  
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 Item" or "Contract Items"** means the list of items identified in Section 3.1 below and on the Pricing Pages.
  
  - 2.2 **"Pricing Pages"** means the schedule of prices, estimated order quantity, and totals contained in wvOASIS or attached hereto as Exhibit A, and used to evaluate the Solicitation responses.
  
  - 2.3 **"Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
  
3. **GENERAL REQUIREMENTS:**
  - 3.1 **Contract Items and Mandatory Requirements:** Vendor shall provide Agency with the Contract Items listed below on an open-end and continuing basis. Contract Items must meet or exceed the mandatory requirements as shown below.
    - 3.1.1 **Sensors for MX-6 (Industrial Scientific Corp. Multi-Gas Detector, or equal)**
      - 3.1.1.1 CO Sensor must be Industrial Scientific Corp. #17124975-1 or compatible.
  
      - 3.1.1.2 O2 Sensor must be Industrial Scientific Corp. #17124975-3 or compatible.
  
      - 3.1.1.3 NO2 Sensor must be Industrial Scientific Corp. #17124975-4 or compatible.
  
      - 3.1.1.4 NO Sensor must be Industrial Scientific Corp. #17124975-D or compatible.

**REQUEST FOR QUOTATION**  
**Multi- Gas Detector Sensors**

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**3.1.1.5** CO/HI Sensor must be Industrial Scientific Corp.  
#17124975-H or compatible.

**3.1.1.6** 5% CH<sub>4</sub> Sensor must be Industrial Scientific Corp.  
#17124975-M or compatible.

**3.1.1.7** 100% CH<sub>4</sub> Sensor must be Industrial Scientific Corp.  
#17124975-N or compatible.

**3.1.2 Sensors for MX-4 (Industrial Scientific Corp. Multi-Gas  
Detector, or equal)**

**3.1.2.1** CO Sensor must be Industrial Scientific Corp. #17134487  
or compatible.

**3.1.2.2** O<sub>2</sub> Sensor must be Industrial Scientific Corp. #17134461  
or compatible.

**3.1.2.3** CH<sub>4</sub> Sensor must be Industrial Scientific Corp. #17134495  
or compatible.

**4. CONTRACT AWARD:**

**4.1 Contract Award:** The Contract is intended to provide Agencies with a purchase price on all 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 Exhibit A Pricing Page.

**4.2 Pricing Pages:** Vendor should complete the Exhibit A Pricing Page by entering the Unit Price, multiplying the Unit Price per sensor by the estimated quantity to determine and enter the Extended Cost per line item. Vendors should then add the Extended Cost for each line item to determine and enter the Total Bid Amount. Vendors may use the attached excel spreadsheet and and only enter the Unit Price for each line item and the excel spreadsheet will sum the Extended Cost and Total Bid Amount automatically.

Vendors submitting bids electronically through wvOasis should enter the Total Bid Amount in the commodity line of wvOasis and upload the Exhibit A Pricing Page as an attachment and submit with their bid.

REQUEST FOR QUOTATION  
Multi- Gas Detector Sensors

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**5. ORDERING AND PAYMENT:**

- 5.1 Ordering:** Vendor shall accept orders through wvOASIS, regular mail, facsimile, e-mail, or any other written form of communication. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Vendor shall ensure that its on-line ordering system is properly secured prior to processing Agency orders on-line.
- 5.2 Payment:** Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

**6. DELIVERY AND RETURN:**

- 6.1 Delivery Time:** Vendor shall deliver standard orders within seven (7) calendar days after orders are received. Vendor shall deliver emergency orders overnight after orders are received. Vendor shall ship all orders in accordance with the above schedule and shall not hold orders until a minimum delivery quantity is met.
- 6.2 Late Delivery:** The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or obtaining the items ordered from a third party.

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

- 6.3 Delivery Payment/Risk of Loss:** Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost of standard order delivery charges in its bid pricing/discount and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.
- 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,

**REQUEST FOR QUOTATION**  
**Multi- Gas Detector Sensors**

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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.

**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.

**REQUEST FOR QUOTATION**  
**Multi- Gas Detector Sensors**

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7.2.3 Any other remedies available in law or equity.

**8. MISCELLANEOUS:**

- 8.1 No Substitutions:** Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- 8.2 Vendor Supply:** Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.
- 8.3 Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** \_\_\_\_\_  
**Telephone Number:** \_\_\_\_\_  
**Fax Number:** \_\_\_\_\_  
**Email Address:** \_\_\_\_\_



Exhibit A  
Pricing Page

<b>Multi-Gas Detective Sensors</b>				
<b>Unit Price Items</b>				
<b>DESCRIPTION</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>ESTIMATED QTY</b>	<b>EXTENDED COST</b>
CO Sensor (for Industrial Scientific Corp. MX-6) #17124975-1	EA		150	
O2 Sensor (for Industrial Scientific Corp. MX-6) #17124975-3	EA		150	
NO2 Sensor (for Industrial Scientific Corp. MX-6) #17124975-4	EA		150	
NO Sensor (for Industrial Scientific Corp. MX-6) #17124975-D	EA		150	
CO/HI Sensor (for Industrial Scientific Corp. MX-6) #17124975-H	EA		150	
5% CH4 Sensor (for Industrial Scientific Corp. MX-6) #17124975-M	EA		150	
100% CH4 Sensor (for Industrial Scientific Corp. MX-6) #17124975-N	EA		150	
CO Sensor (for Industrial Scientific Corp. MX-4) #17134487	EA		150	
O2 Sensor (for Industrial Scientific Corp. MX-4) #17134461	EA		150	
CH4 Sensor (for Industrial Scientific Corp. MX-4) #17134495	EA		150	
<b>TOTAL BID AMOUNT (Includes Shipping Charges)</b>				

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**CONSTRUCTION CONTRACTS:** Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

**ALL CONTRACTS:** 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 exceed 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: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, 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: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

State of \_\_\_\_\_

County of \_\_\_\_\_, to-wit:

Taken, subscribed, and sworn to before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

My Commission expires \_\_\_\_\_, 20\_\_.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** \_\_\_\_\_

# West Virginia Ethics Commission



## Disclosure of Interested Parties to Contracts

Pursuant to *W. Va. Code* § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of \$1 million or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

*"Business entity"* means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation, but does not include publicly traded companies listed on a national or international stock exchange.

*"Interested party"* or *"Interested parties"* means:

- (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
- (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
- (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

*"State agency"* means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of *W. Va. Code* § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

*This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: [ethics@wv.gov](mailto:ethics@wv.gov); website: [www.ethics.wv.gov](http://www.ethics.wv.gov).*

West Virginia Ethics Commission  
**Disclosure of Interested Parties to Contracts**

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: \_\_\_\_\_ Address: \_\_\_\_\_  
\_\_\_\_\_

Name of Authorized Agent: \_\_\_\_\_ Address: \_\_\_\_\_  
\_\_\_\_\_

Contract Number: \_\_\_\_\_ Contract Description: \_\_\_\_\_

Governmental agency awarding contract: \_\_\_\_\_

Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (*attach additional pages if necessary*):

**1. Subcontractors or other entities performing work or service under the Contract**

Check here if none, otherwise list entity/individual names below.

**2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)**

Check here if none, otherwise list entity/individual names below.

**3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)**

Check here if none, otherwise list entity/individual names below.

Signature: \_\_\_\_\_ Date Signed: \_\_\_\_\_

***Notary Verification***

State of \_\_\_\_\_, County of \_\_\_\_\_:

I, \_\_\_\_\_, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public's Signature

**To be completed by State Agency:**

Date Received by State Agency: \_\_\_\_\_

Date submitted to Ethics Commission: \_\_\_\_\_

Governmental agency submitting Disclosure: \_\_\_\_\_

# MODEL 950-ASH

## Arson Scanner Hydrocarbons and Accelerants Detector

### OPERATION AND MAINTENANCE



**MADE IN  
USA**

**GRACE**  
INDUSTRIES, INC.  
Solutions for Life Safety

# MODEL 950-ASH FEATURES





# MODEL 950-ASH FEATURES

- 1. Sensor and LED Arrays:** Sensor detects the presence of hydrocarbon or accelerant vapor. Sensor is replaceable. White and UV LED arrays encircle the Sensor.
- 2. Sensor Guard:** Provides a protective enclosure for the Sensor and LED arrays.
- 3. Coiled Extension Cord:** Allows Telescoping Sensor Probe to be extended.
- 4. Telescoping Sensor Probe:** Extends for ease of investigation. Retracted: 19.5", Fully extended: 45".
- 5. Locking Clips:** Lock the Telescoping Sensor Probe at desired length. Open both clips to extend or shorten.
- 6. Quick Start Guide:** Allows user to operate Model 950-ASH with minimal instruction.
- 7. Audio Sound Port:** Produces audible tones when hydrocarbons or accelerants are detected.
- 8. Analog Meter Display:** Indicates possible presence of hydrocarbons or accelerants. The degree and speed of needle deflection is determined by the concentration and type of hydrocarbon/accelerant detected.
- 9. Meter Backlight:** Illuminates the meter display in low visibility conditions.
- 10. Hydrocarbon/Accelerant Detection Indicators:** When hydrocarbons or accelerants are detected, the analog meter display flashes red. The higher the concentration, the faster the flash rate becomes.
- 11. Power Indicator:** Blue LED flashes until the Sensor has achieved operating temperature. When operating temperature has been reached, the blue LED will glow.
- 12. Mute Indicator:** LED glows red when Mute is on.
- 13. Mute Switch:** Silences audio.
- 14. High/Low Range Switch:** HIGH Range allows the detection of trace levels of hydrocarbons and accelerants. This is the instrument's most sensitive detection mode. LOW Range is used when an area of concern has high concentrations of hydrocarbons. In LOW Range, the sensitivity is reduced to assist in pinpointing hydrocarbon / accelerant source.
- 15. Power On/Off and Detection Range Control:** Turns Model 950-ASH on or off and adjusts Analog Meter to be responsive to the presence of hydrocarbons or accelerants.
- 16. Low Battery Indicator:** Red LED glows when battery is low or has been depleted. Model 950-ASH with low battery has less than 60 minutes of operating time remaining and should be taken out of service and recharged immediately.
- 17. Charging Indicator:** Glows red when Model 950-ASH is charging. Glows green when charging is complete.
- 18. Light / UV Indicator:** Glows blue when ultraviolet LED array is on. Glows red when white LED array is on.
- 19. Light / UV Switch:** Activates the ultraviolet or white LED array and meter backlight.
- 20. Purge Indicator:** Flashes red while the Purge function is active. Glows red when Purge is complete.
- 21. Purge Switch:** Turns Purge function on or off. Purging clears the Sensor of any absorbed contaminants.
- 22. USB Charging Jack:** Remove the protective cap and plug into a USB charger.
- 23. Rubber Grip** for ease of handling and operation.

## SPECIFICATIONS

**Dimensions:** 3-1/4" wide by 3-1/4" deep by 19-1/2" long. Length fully extended: 45".

**Weight:** 2.2 lbs (1kg).

**Enclosure:** Corrosion resistant, powder coated steel.

**Battery:** rechargeable Lithium-ion.

**Battery Run Time:** up to 7-8 hours of continuous operation.

**Battery Charging:** +5V USB adapter powered from 120VAC wall plug charger.

**Battery Charging Time:** approximately 24 hours to fully charge from Low Battery Indication.

**Sensor:** Solid State Metal Oxide Semiconductor.

**White LED:** 8 solid state white LEDs arrayed around Sensor.

**Ultraviolet (UV) LED:** 8 long-wave ultraviolet (395nm) LEDs arrayed around Sensor.

# Arson Scanner Hydrocarbons and Accelerant Detector

## MODEL 950-ASH

The Model 950-ASH Arson Scanner Hydrocarbon and Accelerant Detector is a precision instrument designed specifically for detecting trace levels of hydrocarbons and accelerants.

Model 950-ASH is optimized for detecting hydrocarbons or accelerants that may be present at suspect arson fires. Model 950-ASH functions as an excellent general purpose discovery instrument for field survey such as: searching landfills for methane outgassing, detection of leaking underground storage tanks, or simply as a general purpose gas leak detector.

Additionally, Model 950-ASH employs an array of illuminating ultraviolet and white LEDs which further assist the investigator in locating accelerants or other evidence in situations where detection in low visibility environments becomes difficult. Other beneficial features include a Mute function to silence the audible tones for discreet investigation and a Purge feature for rapid Sensor recovery.

### PRINCIPLE of OPERATION

Model 950-ASH Sensor is a solid-state semiconductor type whose resistance changes in the presence of hydrocarbon or accelerant vapors. This change in resistance is sensed by the signal processing electronics and is displayed as an audio and visual rate signal that is proportional to the relative concentrations of hydrocarbons/accelerants present. The Sensor is heated while the detector is in use to provide stable, consistent operation. The sensing element is housed in a thimble-like structure of a double layer of very fine stainless steel assuring complete operating safety as well as providing mechanical protection.

### OPERATION

**POWER ON:** Power the Model 950-ASH ON by rotating the Power On/Off Detection Range Control clockwise until a click sound is heard. The blue Power Indicator LED will begin to flash, indicating the 950-ASH is in the warmup and Sensor stabilization cycle. After approximately 90-120 seconds, the blue POWER Indicator LED stops flashing and glows blue to indicate the Sensor has reached operating temperature and the instrument is ready for use. During the warmup cycle, you may observe a deflection of the needle and rapid flashing of red LEDs on the Analog Meter Display. This

action is normal and will cease as the detector gradually attains operating temperature. NOTE: The Sensor may not detect the presence of hydrocarbons or accelerants while in the warmup cycle.

The ultraviolet and white LED Arrays will function during the warmup cycle.

### SETTING the SENSITIVITY

**SETTING the SENSITIVITY:** After the 950-ASH has completed the warmup cycle and is in the READY mode, it is time to set the RANGE and sensitivity. Toggle the Range Switch to the HIGH position.

HIGH RANGE allows for the detection of trace levels of hydrocarbons or accelerants.

Rotate the Detection Range Control clockwise until the needle on the Analog Meter Display deflects clockwise and the red Hydrocarbon/Accelerant Detection LEDs begin to flash. If the Mute switch is OFF, you will observe audio tones in synchronism with the red LEDs. To silence the audio tones, switch the Mute control to ON. Next, slowly rotate the Detection Range Control slightly counter clockwise until you no longer observe the red flashing LEDs, the audible tones cease and the needle on the Analog Meter Display falls to the 0, 1, or 2 region of the display.

The Model 950-ASH is now ready to scan for hydrocarbons/accelerants.

**NOTE:** LOW RANGE is used when an area of concern has high concentrations of hydrocarbons. In LOW RANGE, the sensitivity is reduced to assist in pinpointing hydrocarbon / accelerant source.

### DETECTING HYDROCARBONS or ACCELERANTS

To detect the presence of hydrocarbons/accelerants, scan the suspect material or area of concern at an angle of approximately 45° while holding the Sensor end of the Telescoping Sensor Probe approximately ½" to 1" from the area to be surveyed. Scan very slowly to provide sufficient time for vapor to penetrate the Sensor. **NOTE:** The time required for a hydrocarbon or accelerant to change from liquid to vapor and diffuse into the Sensor is dependent upon environmental factors such as temperature, humidity, wind velocity and the type of hydrocarbon/accelerant. It is important to take your time and be patient.

*NOTE: to silence the 950-ASH for discreet investigation, switch the Mute control to the ON position.*



When the Sensor is exposed to a hydrocarbon or accelerant, the Analog Meter Display needle will deflect clockwise, followed by flashing red LEDs and repeating audio tones. This response indicates the possible presence of hydrocarbons/accelerants. If high concentrations of a detected hydrocarbon/accelerant are sensed, it may be necessary to clear the Sensor using the Purge function (see Purge instructions below) and scan the area of concern again. Another positive reaction indicates the presence of a suspect material. Collect a sample of debris for analysis.

For investigations where the Sensor responds to higher levels of hydrocarbon/accelerant vapor, the needle on the Analog Meter may fully deflect to the highest level on the scale. Model 950-ASH can be normalized for these conditions by rotating the Detection Range Control counterclockwise until the flashing Detection Indicator LEDs and audio tones just stop. Upon further investigation, when the audio tones and Detection Indicator LEDs begin again, you are closer to higher concentrations of hydrocarbon/accelerant vapor and may have the opportunity to collect a sample.

## **PURGE**

The Purge function is used to clear the Sensor after exposure to high levels of hydrocarbon or accelerant vapor. Remove the Model 950-ASH detector from the contaminated vicinity and set the Purge control to the ON position. The red Purge Indicator LED will flash. While the Purge feature is in use, audible tones and red Analog Meter LEDs will be observed. Allow the Purge to remain ON until the red Purge indicator LED stops flashing and glows red (this may take approximately 20 seconds). Return the Purge switch to the OFF position and reset the sensitivity and detection threshold. Your 950-ASH is now ready to detect another sample.

**Note:** *While the Purge feature is in use, the Sensor will not detect the presence of hydrocarbons or accelerants.*

Mute feature may be used during the Purge cycle to silence the audio tones.

## **ULTRAVIOLET and WHITE LED ARRAYS**

The LED features of your Model 950-ASH consist of an array of eight long-wave ultraviolet (395 nm) LEDs and an array of eight white LEDs. Each LED array is controlled by a 3-position toggle switch located on the Controls and Display Panel. The Ultraviolet and White LED arrays function independently of each other and cannot be used simultaneously.

It is desirable to use the ultraviolet LED array in as little ambient light at the investigation scene as possible. The ultraviolet LED array allows the investigator to search for a fluorescence or glow of suspect material, potentially indicating the presence of residual or trace amounts of hydrocarbons, accelerants, or other questionable material. Hold the ultraviolet LED array at an angle of approximately 45° and approximately ½" inch away to examine the suspect material. During an investigation, if fluorescence of suspect debris is discovered, it should be gathered and sent to a lab for analysis.

The white LED array feature is desirable for use as a flashlight in dimly lit or low visibility environments. When using this feature, a backlight will illuminate the Analog Meter Display.

### **How Ultraviolet (UV) Light is Used in Arson Investigations**

UV light is used to detect information that is otherwise invisible to the human eye and to uncover valuable evidence that can be used to solve a fire investigation.

UV light is used to identify the presence of hydrocarbons, accelerants, and to identify pour patterns.

UV light not only assists in identifying the presence of accelerants but also in rapidly locating accelerant residues and assists in locating the point of origin of the fire. The color in which accelerants glow is affected by heat exposure. The longer an accelerant is exposed to heat (i.e. the origin), the more differentiated its fluorescence color will be from other, less exposed areas. Evidence of accelerants is absorbed in a fire and is almost always invisible to the naked eye. However, the area contaminated by accelerants is easily discernible under UV light.

Volatile hydrocarbons such as gasoline, kerosene, acetone, etc. fluoresce when exposed to UV light. By using UV light, investigators can accurately identify locations where samples should be collected for further laboratory analysis. UV light can also be helpful in locating fragments of incendiary devices since explosive wrappings are frequently fluorescent. Samples collected in cans and plastic evidence bags can be heated in warm water to form condensation. The latent accelerant residue rises to the surface and can be seen under UV light.

UV light has been used to identify pour patterns, the shape of an accelerant container, and pour trails leading back to containers. UV light will indicate

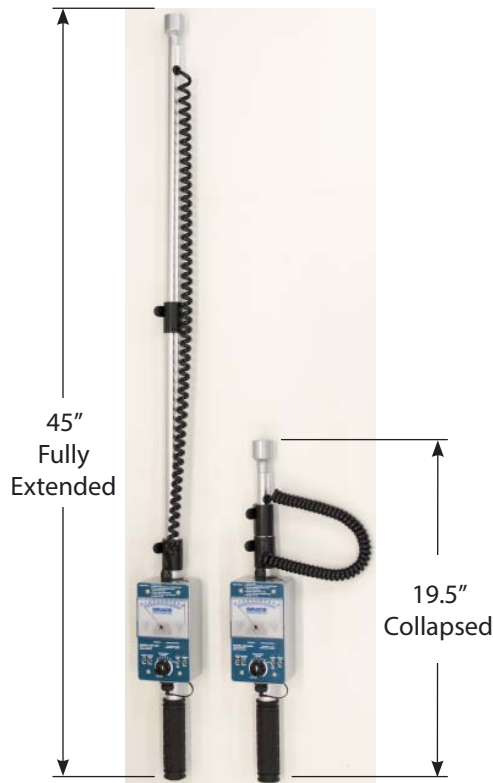
accelerant long after its odor is noticeable. Masking an accelerant will not prevent its UV detection. Accelerant on skin or clothing will fluoresce as well.

### Advantages of Investigating With UV Light

- UV light is not affected by environmental factors such as temperature, humidity, and wind conditions.
- The 950-ASH Sensor responds to a general area of saturation and the UV light aids in pinpointing specific areas.
- UV lights have been proven to effectively fluoresce samples up to two months after an incident.
- After a lengthy, hot fire, the odors of hydrocarbons/accelerants have usually disappeared.

### RECOMMENDED INVESTIGATION TECHNIQUES

When attempting to detect trace amounts of hydrocarbons or accelerants, hold the Sensor approximately ½" to 1" away from the suspect material and scan the area very slowly. For ease of investigation, adjust the Telescoping Sensor Probe length by unlocking the Clips, extending to the desired length and then closing the Locking Clips.



It is important to scan the area very slowly because a hydrocarbon or accelerant must vaporize before it can be detected by the Sensor. The time required for hydrocarbons/accelerants to vaporize and become airborne particles may vary from one investigation to another.

Environmental factors such as temperature, humidity, wind velocity, and type of hydrocarbon/accelerant all affect the instrument's ability to detect.

Be patient and observant when using the instrument.

Keep in mind good investigative practices. Survey the area thoroughly and imagine where you would take a sample if you did not have the 950-ASH. Take your time. Check the top layer of debris first before digging to obtain suspect material. Positive samples may be obtained from a suspect area many hours or even days after a fire has occurred.

### STORAGE and MAINTENANCE

At the end of each use, clean with a soft cloth. **DO NOT use cleaning solvents.**

After each use, inspect the instrument for signs of physical damage. Remove from service if physical damage is observed.

To prevent damage between use, collapse the Telescoping Sensor Probe to its shortest length, lock the clips and store the 950-ASH, wall charger, and mini-USB cable in the protective case provided.

Store in a dry, well ventilated area. Recommended storage conditions are: 50° to 77°F (10° to 25°C) at no more than 65% relative humidity. Do not leave your 950-ASH exposed to elevated temperatures such as those that occur inside a vehicle during summer months.

The Sensor may be removed for cleaning or replacement by gently pulling it from the Sensor Socket. Cleaning is usually not required, however, if the Sensor should become contaminated with ashes or other debris, carefully loosen and unplug it from the Sensor Socket. Gently tap it over a white piece of paper and observe if any material is dislodged. Plug the Sensor back into the socket by carefully aligning the pins and gently pressing the Sensor into place.

If the Sensor should accidentally become submerged in liquid, remove it from the Sensor Socket and allow the Sensor to dry for 24 hours. **Permanent damage to the Sensor is likely to occur if submerged in any liquid.** Replacement may be necessary. Sensors are available for purchase from Grace Industries, Inc.

### CHARGING

Model 950-ASH has a mini-USB Charging Jack at the bottom of the main housing. The battery can be charged using the mini-USB cable and wall plug charger provided with the instrument. A computer USB port

may also be used to charge the battery.

The Charging Indicator will glow red while the Model 950-ASH is charging. Battery is fully charged when the Charging Indicator glows green.

Complete charge time is up to 24 hours.

*NOTE: charging via computer USB port may take longer.*



USB Charging Wall Plug Power Cube and Mini-USB Cord

## TROUBLESHOOTING

- **When turned ON, the needle on the Analog Meter fully deflects:**

The Sensor may be contaminated or the atmosphere may be contaminated. The 950-ASH is an extremely sensitive instrument and care must be taken to ensure no hydrocarbon or accelerant residue remains in or located near the Sensor.

- When initially turning the detector ON, be sure Detection Range Control is rotated completely counterclockwise without turning OFF.
- Allow unit to warmup. The Power Indicator will glow steady Blue when ready.
- Turn the Purge feature ON to clear the Sensor and allow any absorbed contaminant or residue to be burned off.
- Allow the detector to remain ON for several minutes in a clean, draft-free environment.
- Set the Sensitivity.
- **Sensor will not respond to hydrocarbons or accelerants:**
  - Some hydrocarbons and accelerants have odor

additives that can be mistaken for hydrocarbon or accelerant vapor. You may be noticing this odor after all of the hydrocarbon/accelerant vapor has completely volatilized away and only the odorizer remains.

- The hydrocarbon or accelerant might not be vaporizing due to many factors including temperature and type of hydrocarbon or accelerant.
- Allow sufficient time for a true reading. It may be necessary to wait several minutes for accumulation of airborne vapor for detection.
- **Inconsistent readings:**
  - Sensor can absorb hydrocarbons/accelerants that may cause an erratic response. This may be due to extended periods of storage or a contaminated atmosphere. Move to an area known to be free of contaminants and use the Purge feature to clear the Sensor.

## HYDROCARBON, ACCELERANTS and GASES DETECTED by MODEL 950-ASH

Partial list of common hydrocarbons and accelerants that can be detected by the Model 950-ASH includes, but is not limited to:

**Fuels:** Kerosene • Gasoline • Diesel Fuel.

**Hydrocarbons and their derivatives:** Methane • Ethane • Propane • Butane • Pentane • Hexane • Heptane • Octane • Propylene • Benzene • Toluene • Xylene • Ethylene Oxide. **Halogenated Hydrocarbons:** Methyl Chloride • Methylene Chloride • Ethyl Chloride • Ethylene Chloride • Ethylidene Chloride • Trichloroethane • Vinylidene Chloride • Trichloroethylene • Methyl Bromide • Vinyl Chloride. **Alcohols:** Methanol/Ethanol • n-Propanol • Isopropanol • n-Butanol • Isobutanol. **Ethers:** Methyl Ether • Ethyl Ether **Ketones:** Acetone • Methyl Ethyl Ketone. **Esters:** Methyl Acetate • Ethyl Acetate • n-Propyl Acetate • Isobutyl Acetate. **Nitrogen Compounds:** Nitro Methane • Mono Methyl Amine • Dimethylamine • Trimethylamine • Mono Ethyl Amine • Diethyl Amine. **Inorganic Gases:** Ammonia • Hydrogen • Hydrogen Cyanide.

## WARRANTY INFORMATION

Grace Industries, Inc. warrants your unit to be free from defects in workmanship and materials for a period of one (1) year from the date of original purchase. This warranty is valid only when the returned products are accompanied by a sales slip or other proof of purchase that states the date and location of purchase. Grace Industries, Inc. will not repair or replace any merchandise under warranty which has been damaged because of accident, misuse or abuse of the products while in possession or control of the consumer. This warranty is void if any attempt to repair or replace parts was made or attempted by other than qualified Grace Industries Inc. personnel. This warranty is void if any of the sealed compartments are opened or tampered with. Before sending product to Grace for repair, call for Return Authorization or RA#. Please reference RA# in shipping documents for tracking purposes. Send all repair products, prepaid and accompanied by proof of purchase to: Grace Industries, Inc., Repair Division, 305 Bend Hill Road, Fredonia, PA 16124 U.S.A. Grace Industries, Inc. shall not be liable for any direct, incidental or other consequential loss or damage arising out of failure of the device to operate. Customer is responsible for return shipping charges.

The sole and exclusive remedy under all guarantees or warranties, expressed or implied, is strictly limited to repair or replacement as herein provided. All implied warranties, including but not limited to, warranties of fitness and merchantability, are hereby limited in duration to a period ending one (1) year from the date of purchase. The warranty and liability set forth in the prior paragraphs are in lieu of all other warranties, expressed or implied, in law or in fact, including implied warranties of merchantability and fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Technical assistance is available by contacting Grace Industries, Inc. at 724-962-9231. Product issues may be reported at any time to Grace Industries, Inc. at 724-962-9231.

The information contained in this booklet is believed to be accurate and reliable.

Grace Industries, Inc. provides this information as a guide only.

**GRACE**  
**INDUSTRIES, INC.**  
*Solutions for Life Safety*

305 Bend Hill Road  
Fredonia, PA 16124 U.S.A.  
724-962-9231  
[www.arsondetection.com](http://www.arsondetection.com)



# Model 950-ASH

Arson Scanner Hydrocarbons  
and Accelerants Detector  
Operation and Maintenance



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Solutions for Life Safety

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# Model 950-ASH

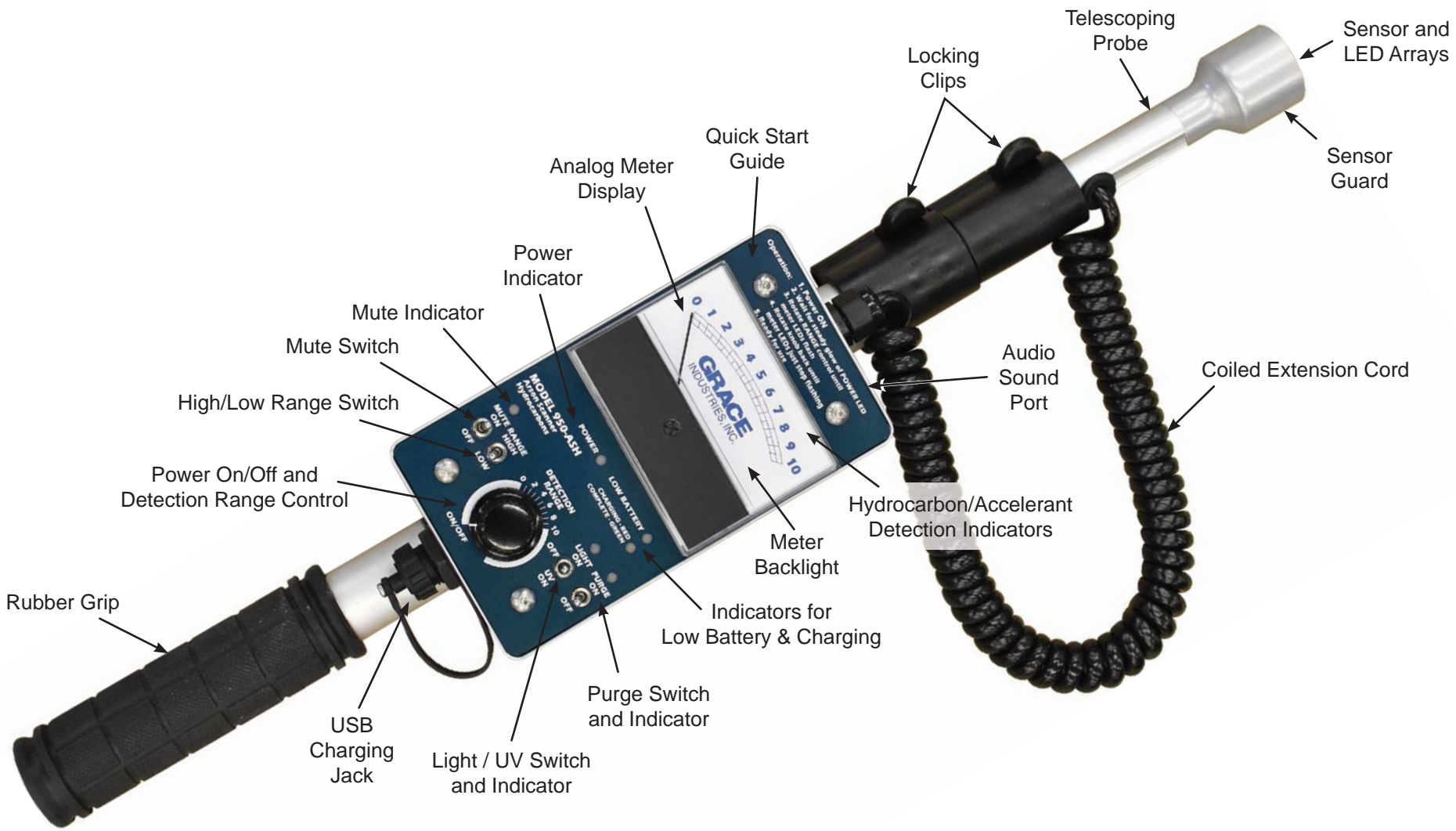
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***WARNING!! - Model 950-ASH Should Not Be Used To Detect Carbon Monoxide!***

# Model 950-ASH

## Top View



# Model 950-ASH

## Features & Benefits

- Portable, easy to use, rugged.
- Detects approximately 125 hydrocarbons and accelerants including heating gases.
- High/Low Range aids in pinpointing source of high hydrocarbon/accelerant concentration.
- Solid State Sensor, housed in a protective guard, with a coiled extension cord.
- Audio and Visual displays indicate detection of suspect material.
- Ultraviolet and White LEDs arrayed in the Sensor Head to aid investigations.
- Powered by rechargeable Lithium-ion battery with operating time of up to 7-8 hours continuous use.
- Corrosion resistant, powder coated steel enclosure.
- Purge permits quick recovery of Sensor.
- Mute silences audio tones and permits discreet investigation.
- Applications: Arson Investigation, Leak detection, General purpose gas detection.



# Arson Scanner Hydrocarbons and Accelerants Detector



The Model 950-ASH Arson Scanner Hydrocarbon and Accelerant Detector is a precision instrument designed specifically for detecting trace levels of hydrocarbons and accelerants.

Model 950-ASH is optimized for detecting hydrocarbons or accelerants that may be present at suspect arson fires. Model 950-ASH functions as an excellent general purpose discovery instrument for field survey such as: searching landfills for methane outgassing, detection of leaking underground storage tanks, or simply as a general purpose gas leak detector.

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# Principle of Operation

Model 950-ASH Sensor is a solid-state semiconductor type whose resistance changes in the presence of hydrocarbon or accelerant vapors.

This change in resistance is sensed by the signal processing electronics and is displayed as an audio and visual rate signal that is proportional to the relative concentrations of hydrocarbons or accelerants present. The Sensor is heated while the detector is in use to provide stable, consistent operation.

The sensing element is housed in a thimble-like structure of a double layer of very fine stainless steel ensuring complete operating safety as well as providing mechanical protection.



# Power On

Power ON by rotating the Power On/Off Detection Range Control clockwise until a click sound is heard.

The blue Power Indicator LED will begin to flash, indicating the 950-ASH is in the warmup and Sensor stabilization cycle. After approximately 90-120 seconds, the blue POWER Indicator LED stops flashing and glows blue to indicate the Sensor has reached operating temperature and the instrument is ready for use.

During the warmup cycle, you may observe a deflection of the needle and rapid flashing of red LEDs on the Analog Meter Display. This action is normal and will cease as the Sensor gradually attains operating temperature.

NOTE: Sensor may not detect the presence of hydrocarbons or accelerants while in the warmup cycle.

The ultraviolet and white LED Arrays will function during the warmup cycle.



# Setting the Sensitivity



After the 950-ASH has completed the warmup cycle and is in the READY mode, it is time to set the RANGE and sensitivity. Toggle the Range Switch to the HIGH position.

**HIGH RANGE** allows for the detection of trace levels of hydrocarbons or accelerants.

Rotate the Detection Range Control clockwise until the needle on the Analog Meter Display deflects clockwise and the red Hydrocarbon/Accelerant Detection LEDs begin to flash. If the Mute switch is OFF, you will observe audio tones in synchronism with the red LEDs. To silence the audio tones, switch the Mute Switch to ON. Next, slowly rotate the Detection Range Control slightly counter clockwise until you no longer observe the red flashing LEDs, the audible tones cease, and the needle on the Analog Meter Display falls to the 0, 1, or 2 region of the display.

The Model 950-ASH is now ready to scan for hydrocarbons/accelerants.

**NOTE: LOW RANGE** is used when an area of concern has high concentrations of hydrocarbons. In LOW RANGE, the sensitivity is reduced to assist in pinpointing hydrocarbon / accelerant source.



# Detecting Hydrocarbons or Accelerants



To detect the presence of hydrocarbons/accelerants, scan the suspect material or area of concern at an angle of approximately 45° while holding the Sensor end of the Telescoping Sensor Probe approximately ½” to 1” from the area to be surveyed.

Scan very slowly to provide sufficient time for vapor to penetrate the Sensor.

NOTE: The time required for a hydrocarbon/accelerant to change from liquid to vapor and diffuse into the Sensor is dependent upon environmental factors such as temperature, humidity, wind velocity and the type of hydrocarbon/accelerant. It is important to take your time and be patient.

NOTE: To silence the 950-ASH for discreet investigation, switch Mute to the ON position.

# Detecting Hydrocarbons or Accelerants



When the Sensor is exposed to a hydrocarbon or accelerant, the Analog Meter Display needle will deflect clockwise, followed by flashing red LEDs and repeating audio tones. This response indicates the possible presence of hydrocarbons/accelerants. If high concentrations of a detected hydrocarbon/accelerant are sensed, it may be necessary to clear the Sensor using the Purge function and scan the area of concern again. Another positive reaction indicates the presence of a suspect material. Collect the sample of debris for analysis.

For investigations where the Sensor responds to higher levels of hydrocarbon/accelerant vapor, the needle on the Analog Meter may fully deflect to the highest level on the scale. Model 950-ASH can be normalized for these conditions by rotating the Detection Range Control counterclockwise until the flashing Detection Indicator LEDs and audio tones just stop. Upon further investigation, when the audio tones and Detection Indicator LEDs begin again, you are closer to higher concentrations of hydrocarbon/accelerant vapor and may have the opportunity to collect a sample.



# Purging the Sensor



The Purge function is used to clear the Sensor after exposure to high levels of hydrocarbon or accelerant vapor.

Remove the Model 950-ASH detector from the contaminated vicinity and set the Purge control to the ON position.

The red Purge Indicator LED will flash.

While the Purge feature is in use, audible tones and red Analog Meter LEDs will be observed.

Allow the Purge to remain ON until the red Purge indicator LED stops flashing and glows red (this may take approximately 20 seconds).

Return the Purge switch to the OFF position and reset the sensitivity and detection threshold. Your 950-ASH is now ready to detect another sample.

**Note: While the Purge feature is in use, Sensor will not detect the presence of hydrocarbons or accelerants.**

Mute feature may be used during the Purge cycle to silence the audio tones.

# Principle of Operation for Ultraviolet and White LED Arrays



UV and White LEDs arrayed around the Sensor

The LED features of your Model 950-ASH consist of an array of eight long-wave ultraviolet (395 nm) LEDs and an array of eight white LEDs.

Each LED array is controlled by a 3-position toggle switch located on the Controls and Display Panel. The Ultraviolet and White LED arrays function independently of each other and cannot be used simultaneously.

It is desirable to use the ultraviolet (UV) LED array in as little ambient light at the investigation scene as possible. The UV LED array allows the investigator to search for a fluorescence or glow of suspect material, potentially indicating the presence of residual or trace amounts of hydrocarbons, accelerants, or other questionable material. Hold the UV LED array at an angle of approximately 45° and approximately ½" inch away to examine the suspect material. During an investigation, if fluorescence of suspect debris is discovered, it should be gathered and sent to a lab for analysis.

The white LED array feature is desirable for use as a flashlight in dimly lit or low visibility environments. When using this feature, a backlight will illuminate the Analog Meter Display.



3-Position Switch for UV and White LED Light



# How Ultraviolet (UV) Light is Used in Arson Investigations



Ultraviolet (UV) light is used to detect information that is otherwise invisible to the human eye and to uncover valuable evidence that can be used to solve a fire investigation.

UV light is used to identify the presence of hydrocarbons, accelerants, and to identify pour patterns.

UV light not only assists in identifying the presence of accelerants but also in rapidly locating accelerant residues and assists in locating the point of origin of the fire.

The color in which accelerants glow is affected by heat exposure. The longer an accelerant is exposed to heat (i.e. the origin), the more differentiated its fluorescence color will be from other, less exposed areas.

Evidence of accelerants is absorbed in a fire and is almost always invisible to the naked eye. However, the area contaminated by accelerants is easily discernible under UV light.

# How Ultraviolet (UV) Light is Used in Arson Investigations



Volatile hydrocarbons such as gasoline, kerosene, acetone, etc. fluoresce when exposed to UV light. By using UV light, investigators can accurately identify locations where samples should be collected for further laboratory analysis.

UV light can also be helpful in locating fragments of incendiary devices since explosive wrappings are frequently fluorescent. Samples collected in cans and plastic evidence bags can be heated in warm water to form condensation. The latent accelerant residue rises to the surface and can be seen under UV light.

UV light has been used to identify pour patterns, the shape of an accelerant container, and pour trails leading back to containers. UV light will indicate accelerant long after its odor is noticeable. Masking an accelerant will not prevent its UV detection. Accelerant on skin or clothing will fluoresce as well.

# How Ultraviolet (UV) Light is Used in Arson Investigations



## Advantages of Investigating With UV Light

- UV light is not affected by environmental factors such as temperature, humidity, and wind conditions.
- The 950-ASH Sensor responds to a general area of saturation and the UV light aids in pinpointing specific areas.
- UV lights have been proven to effectively fluoresce samples up to two months after an incident.
- After a lengthy, hot fire, the odors of hydrocarbons or accelerants have usually disappeared.

# Recommended Investigation Techniques



When attempting to detect trace amounts of hydrocarbons or accelerants, hold the Sensor approximately ½" to 1" away from the suspect material and scan the area very slowly.

For ease of investigation, adjust the Telescoping Sensor Probe length by unlocking the Clips, extending to the desired length and then closing the Locking Clips.

It is important to scan the area very slowly because a hydrocarbon or accelerant must vaporize before it can be detected by the Sensor. The time required for hydrocarbons/accelerants to vaporize and become airborne particles may vary from one investigation to another. Environmental factors such as temperature, humidity, wind velocity, and type of hydrocarbon/accelerant all affect the instrument's ability to detect.

Be patient and observant when using the instrument.

Keep in mind good investigative practices. Survey the area thoroughly and imagine where you would take a sample if you did not have the 950-ASH. Take your time. Check the top layer of debris first before digging to obtain suspect material. Positive samples may be obtained from a suspect area many hours or even days after a fire has occurred.



# Storage and Maintenance

At the end of each use, clean with a soft cloth. DO NOT use cleaning solvents.

After each use, inspect the instrument for signs of physical damage. Remove from service if physical damage is observed.

To prevent damage between use, collapse the Telescoping Sensor Probe to its shortest length, lock the clips and store the 950-ASH, wall charger, and mini-USB cable in the protective case provided.

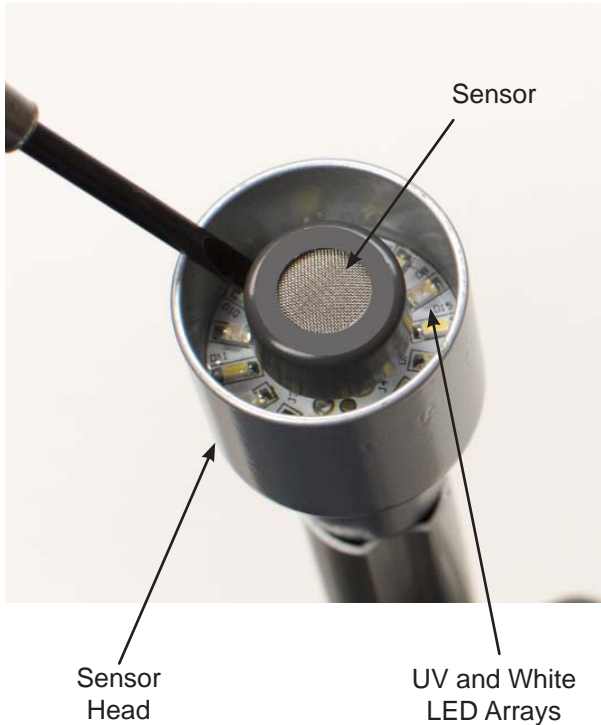
Store in a dry, well ventilated area. Recommended storage conditions are: 50° to 77°F (10° to 25°C) at no more than 65% relative humidity. Do not leave your 950-ASH exposed to elevated temperatures such as those that occur inside a vehicle during summer months.

The Sensor may be removed for cleaning or replacement ***See next page for detailed instruction of Sensor Removal or Replacement.***

Cleaning is usually not required, however, if the Sensor should become contaminated with ashes or other debris, carefully loosen and unplug it from the Sensor Socket. Gently tap it over a white piece of paper and observe if any material is dislodged. Plug the Sensor back into the socket by carefully aligning the pins and gently pressing the Sensor into place.

If the Sensor should accidentally become submerged in liquid, remove it from the Sensor Socket and allow to dry for 24 hours. Permanent damage to the Sensor is likely to occur if submerged in any liquid. Replacement may be necessary. Sensors are available for purchase from Grace Industries, Inc.

# Removal / Replacement of Sensor



- Remove damaged or malfunctioning Sensor from the socket located at the end of the Telescoping Probe.
- Use a small screwdriver to carefully and incrementally loosen the Sensor from the socket.
- Once it is loose, pull Sensor out of the Sensor Guard.

# Removal / Replacement of Sensor



Sensor Pins

Sensor Socket

- Plug in new replacement Sensor by carefully aligning the Sensor pins into the socket.



- Gently and firmly press the replacement Sensor into the socket until it is secure.
- Allow for required warm-up period (approximately 3 minutes) before use.

# Battery Run Time & Battery Charging



USB Charging Wall Plug Power Cube  
and Mini-USB Cord

950-ASH is powered by a rechargeable Lithium-ion battery with operating time of up to 7-8 hours of continuous use.

Model 950-ASH has a mini-USB Charging Jack at the bottom of the main housing. The battery can be charged using the mini-USB cable and wall plug charger provided with the instrument. A computer USB port may also be used to charge the battery.

The Charging Indicator will glow red while the Model 950-ASH is charging. Battery is fully charged when the Charging Indicator glows green.

Complete charge time is up to 24 hours.

**NOTE:** Charging via computer USB port may take longer.



# Troubleshooting

## **When turned ON, the needle on the Analog Meter fully deflects:**

The Sensor may be contaminated or the atmosphere may be contaminated. The 950-ASH is an extremely sensitive instrument and care must be taken to ensure no hydrocarbon or accelerant residue remains in or located near the Sensor.

- When initially turning the detector ON, be sure the High/Low Range Switch is set to High and Detection Range Control is rotated completely counterclockwise without turning OFF.
- Allow unit to warmup. The Power Indicator will glow steady Blue when ready.
- Turn the Purge feature ON to clear the Sensor and allow any absorbed contaminant or residue to be burned off.
- Allow the detector to remain ON for several minutes in a clean, draft-free environment.
- Set the Sensitivity.

## **Sensor will not respond to hydrocarbons or accelerants:**

- Some hydrocarbons and accelerants have odor additives that can be mistaken for hydrocarbon or accelerant vapor. You may be noticing this odor after all of the hydrocarbon/accelerant vapor has completely volatilized away and only the odorizer remains.
- The hydrocarbon or accelerant might not be vaporizing due to many factors including temperature, humidity, wind velocity, and type of hydrocarbon or accelerant.
- Allow sufficient time for a true reading. It may be necessary to wait several minutes for accumulation of airborne vapor for detection.

## **Inconsistent readings:**

- Sensor can absorb hydrocarbons and accelerants that may cause an erratic response. This may be due to extended periods of storage or a contaminated atmosphere. Move to an area known to be free of contaminants and use the Purge feature to clear the Sensor.

# Hydrocarbon, Accelerants, and Gases Detected by 950-ASH

Partial list of common hydrocarbons and accelerants that can be detected by the Model 950-ASH includes, but is not limited to:

**Fuels:** Kerosene • Gasoline • Diesel Fuel.

**Hydrocarbons and their derivatives:** Methane • Ethane • Propane • Butane • Pentane • Hexane • Heptane • Octane • Propylene • Benzene • Toluene • Xylene • Ethylene Oxide.

**Halogenated Hydrocarbons:** Methyl Chloride • Methylene Chloride • Ethyl Chloride • Ethylene Chloride • Ethylidene Chloride • Trichloroethane • Vinylidene Chloride • Trichloroethylene • Methyl Bromide • Vinyl Chloride.

**Alcohols:** Methanol/Ethanol • n-Propanol • Isopropanol • n-Butanol • Isobutanol.

**Ethers:** Methyl Ether • Ethyl Ether

**Ketones:** Acetone • Methyl Ethyl Ketone. **Esters:** Methyl Acetate • Ethyl Acetate • n-Propyl Acetate • Isobutyl Acetate.

**Nitrogen Compounds:** Nitro Methane • Mono Methyl Amine • Dimethylamine • Trimethylamine • Mono Ethyl Amine • Diethyl Amine. **Inorganic Gases:** Ammonia • Hydrogen • Hydrogen Cyanide.

# Warranty

Grace Industries, Inc. warrants your unit to be free from defects in workmanship and materials for a period of one (1) year from the date of original purchase. This warranty is valid only when the returned products are accompanied by a sales slip or other proof of purchase that states the date and location of purchase. Grace Industries, Inc. will not repair or replace any merchandise under warranty which has been damaged because of accident, misuse or abuse of the products while in possession or control of the consumer. This warranty is void if any attempt to repair or replace parts was made or attempted by other than qualified Grace Industries Inc. personnel. This warranty is void if any of the sealed compartments are opened or tampered with. Before sending product to Grace for repair, call for Return Authorization or RA#. Please reference RA# in shipping documents for tracking purposes. Send all repair products, prepaid and accompanied by proof of purchase to: Grace Industries, Inc., Repair Division, 305 Bend Hill Road, Fredonia, PA 16124 U.S.A. Grace Industries, Inc. shall not be liable for any direct, incidental or other consequential loss or damage arising out of failure of the device to operate. Customer is responsible for return shipping charges.

The sole and exclusive remedy under all guarantees or warranties, expressed or implied, is strictly limited to repair or replacement as herein provided. All implied warranties, including but not limited to, warranties of fitness and merchantability, are hereby limited in duration to a period ending one (1) year from the date of purchase. The warranty and liability set forth in the prior paragraphs are in lieu of all other warranties, expressed or implied, in law or in fact, including implied warranties of merchantability and fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Technical assistance is available by contacting Grace Industries, Inc. at 724-962-9231. Product issues may be reported at any time to Grace Industries, Inc. at 724-962-9231.

The information contained in this booklet is believed to be accurate and reliable.

Grace Industries, Inc. provides this information as a guide only.

# Model 950-ASH

## Arson Scanner Hydrocarbons and Accelerants Detector



**GRACE**  
INDUSTRIES, INC.  
*Solutions for Life Safety*

[www.arsondetection.com](http://www.arsondetection.com)

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*Price Quotation*  
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WEST VIRGINIA STATE FIRE COMMISSION  
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2nd Floor  
CHARLESTON, WV 25301  
ATTN: Melissa Hapney

Phone:  
Fax:  
Contract No: CMA 0212 0212 MRO18-8497

Account #: BEWV3184  
Quote #: 86687  
Job #:

Due Date:  
Expiration Date: 04/12/2020  
PO #:

<u>Part #</u>	<u>Customer Part #</u>	<u>Description</u>	<u>Quantity</u>	<u>Price/EA</u>	<u>Extended Price</u>
11587-04902		MODEL 950-ASH, Arson	12	\$1,974.0000	\$23,688.00
		MODEL 950-ASH, Arson Scanner, Hydrocarbons, and Accelerants Detector			

USD Subtotal: \$23,688.00  
Shipping & Handling: \$0.00

**USD Total: \$23,688.00**

Thank you,

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\*Shipping & Handling charges are subject to change.