

REQUEST FOR PROPOSAL (RFP) NO. 24-009

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, AND EXPLOSIVE MATERIALS (CBRNE) DETECTION EQUIPMENT, SUPPORT, AND MAINTENANCE

Proposers shall submit an electronic copy of their proposal to the COG LOCKBOX system, as per the submission instructions in Section XI of this RFP.

Submission Due Date: December 20, 2023, 2:00 PM EST

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I. SUMMARY

Services requested	Purchase of and support and maintenance services for chemical, biological, radiological, nuclear, and high-yield explosive detection equipment
Contract type	Time & materials
Number of contracts	One or multiple
Duration of contract	Two (2) years with three options to extend for an additional two (2) years each
Payment method	Net 30
Planned duration of RFP advertisement	4 weeks
Start of advertisement period for RFP	November 22, 2023
Deadline for questions about RFP	10 business days before deadline
Deadline for COG responses to	5 business days before deadline
questions	
Deadline for proposals	December 20, 2023

II. INTRODUCTION AND BACKGROUND

- A. The Metropolitan Washington Council of Governments ("COG") is the regional organization of 24 of the Washington metropolitan area's major local governments and their governing officials, plus area members of the Maryland and Virginia legislatures and the U.S. Senate and House of Representatives. COG provides a focus for action on issues of regional concern, including coordinating public safety programs for the region. COG is supported by financial contributions from its participating local governments, federal and state government grants and contracts, and through donations from foundations and the private sector. More information on COG may be found at www.mwcog.org.
- B. The District of Columbia Fire and Emergency Medical Services Department ("DC FEMS") was previously the recipient of Urban Area Security Initiative ("UASI") program grants to enable strategic coordination and leveraging of resources to ensure the optimal performance of provide chemical, biological, radiological, nuclear, and high-yield explosive ("CBRNE") metering and detection equipment. COG has now taken over the grants and coordination functions.
- C. The purpose of this solicitation is to strengthen the CBRNE detection and response capabilities of the entire National Capital Region ("NCR"). The project shall establish contracts as necessary to purchase, maintain, and repair detection equipment, and to provide supplies necessary for operation.

III. DEFINITIONS

- A. Throughout this Request for Proposals ("RFP"), the following definitions shall hold:
 - 1. Contracting Officer. The Executive Director of the Metropolitan Washington Council of Governments or their designee.
 - 2. Contractor. An individual or organization awarded a prime contract based on this solicitation.

- 3. *Electronic Payment*. The payment of money to a vendor by electronic means, including by means of a purchase card (P-card) or Automated Clearing House (ACH) funds transfer method.
- 4. *Key Personnel*. Personnel proposed by the Proposer (see below) to meet the requirements of the RFP for acceptance by COG. Any changes to the proposed personnel following the proposal must be approved by COG.
- 5. National Capital Region ("NCR"). As defined in 32 CFR § 70.3, the National Capital Region consists of the District of Columbia, Prince George's and Montgomery Counties in Maryland, Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia, and all cities and towns included within the outer boundaries of the foregoing counties.
- 6. Proposer. The party of interest submitting a proposal in response to this RFP.
- 7. Subcontractor. An individual or business firm contracted to perform part or all of a Contractor's contract.
- 8. Technical Selection Committee. The Committee established to review proposals received in response to this solicitation and which recommends selection of contractors to the COG Contracting Officer.

IV. SCOPE OF WORK

- A. COG is seeking a qualified Contractor or Contractors to provide CBRNE metering and detection equipment and the supplies necessary to make the equipment operable. Additionally, the Contractor or Contractors shall be able to provide repairs, routine maintenance, and calibration of such equipment and the capability to provide loaner equipment when repairs would require the removal from service of such equipment.
- B. The Contractor shall provide repairs, routine maintenance, and calibration of CBRNE detection equipment and response capabilities on an as-needed basis. Service is to be conducted on-site, in specified locations of the NCR, requiring service by factory-trained and certified repair technicians.
- C. The Contractor shall provide proof of certification from the manufacturer for the repair technicians doing service work on any equipment. All of the authorized service work being provided by the Contractor must be in accordance with the manufacturer's service recommendations for that specific device. A list of required service work includes, but is not limited to:
 - 1. Battery Checks. A diagnostic procedure to ensure proper voltage of device batteries, and replacement as needed.
 - 2. Board Checks. A complete examination of display and circuit boards for any defects, dirt, corrosion, or any other problems that may affect the overall functioning of the detection device.
 - 3. *Calibration*. The procedure used to adjust the detection device for proper response using the proper standards specified by the device manufacturer.

- 4. Cleaning. Providing a complete external and internal cleaning of the detection device to eliminate any dirt, water, debris, or corrosion that may affect the overall operation of the detection device.
- 5. *Diagnostics*. Procedures which provide a complete evaluation of all sensors, pumps, lamps, tubing, display screens, and data logging features of any or all detection devices, when applicable.
- 6. Factory Test. The manufacturer recommendations to test the functionality of the device, to include proper calibration of all sensors as well as proper function of audible alarms due to reached gas or radiation limits, or some portion of device failure.
- 7. Filter Replacement. The replacement of any and all filters, both internal and external, per manufacturer recommendation or as otherwise needed due to contamination of water, dirt, or other products and/or chemicals which may adversely affect the operation of the device.
- 8. Sensor Checks. A complete diagnostic check of all sensors contained within the detection device, to include gases and radiation.
- Service Pump. Performing a complete function test to ensure proper functioning
 of the pump device, as well as ensuring device alarms when pump failure occurs.
 The servicing and testing of the pump must be done in accordance with
 manufacturer recommendations.
- 10. Software Upgrades. Any manufacturer-provided updates to the software running on a detection device, downloaded during servicing.
- D. The Contractor shall establish an on-site maintenance schedule with each agency within the NCR. Contractor shall coordinate selected sites within each jurisdiction where mobile calibration services will be set up. Contractor shall provide a point of contact for all repair and service orders.
- E. The Contractor shall be responsible for providing a secure, web-based real-time tracking system designed to manage CBRNE personnel, equipment, and locations. This system shall be accessible from a variety of computer platforms, to include mobile devices such as smart phones and tablet computers. It is critical that this system be in place where capabilities can be accessed and managed in real time from internet-capable devices. The system shall meet these minimum requirements:
 - 1. Visualize all equipment, personnel, and location data on a map-based graphical user interface.
 - 2. Global search and display of equipment, personnel, and location records.
 - 3. Able to customize generated against existing records.
 - 4. Includes security protocols that allow specific users and/or user groups, and limitations on access and approval.
 - 5. Provides single sign-on ("SSO") security protocols.

- 6. Monitoring of real-time inventory levels of assets, including spare parts inventory.
- 7. Assigns assets (equipment and/or personnel) to a user or location.
- 8. Tracks asset service dates, calibration information, and certifications.
- F. The repair, calibration, and maintenance of the equipment listed under Attachment A, "HAZMAT Inventory", shall be covered under the contract for the entire period of performance. Additional equipment may be added to this schedule during the Contract Period and will be captured via amendment.
- G. The equipment that requires service under the contract shall include, but may not be limited to:
 - 1. Multi-gas handheld detection meters
 - 2. Multi-gas portable detection meters
 - 3. Single gas handheld detection meters
 - 4. Radiological handheld devices (Alpha, beta, and gamma)
 - 5. Handheld mercury detection devices
 - 6. Handheld CMS chip style detection devices
 - 7. Handheld bellows style pumps for colorimetric detection devices
 - 8. Handheld portable battery power automatic pump for colorimetric detection
 - 9. Handheld chemical, biological, and explosive detection devices
 - 10. Radiological dosimeter devices
 - 11. Gas chromatograph and mass spectroscopy devices
 - 12. Fourier transform infrared spectroscopy devices
 - 13. Raman laser detection devices
 - 14. Heat detection devices
 - 15. Service test applicable personal protective clothing.
 - 16. Cal Gas Cylinders pickup and refill
- H. Repair and Service Requirements
 - 1. The minimum expectation for repair and service requirements is as follows:
 - a. Requests for repairs or service shall be acknowledged and responded to within one business day. Orders for new equipment shall be acknowledged within one business day.

- b. Meters shall be picked up, repaired, and dropped off by the vendor.
- c. Delivery times for all orders shall be provided prior to shipment.
- d. All repair work will be quoted in writing and submitted to COG or such personnel as COG will direct as a Program Manager for approval prior to repairs being commenced.
- e. A repair time exceeding two (2) weeks must be advised in advance, and a written description of the reasons for the extended repair time must be provided to COG.
- f. All purchases to be billed to COG in excess of five hundred dollars (\$500.00) shall be approved in writing by COG or such personnel as COG will direct as a Program Manager prior to fulfillment.
- g. The Contractor shall provide a monthly spreadsheet tracking expenditures.
- 2. Excessive Failures. A failure rate for returning equipment to the jurisdiction within ten (10) business days of greater than fifteen percent (15%) of repairs shall be considered excessive and may be cause for contract termination.

I. Training Programs

1. The Contractor shall provide, either directly or through a subcontractor, training programs on the use of the equipment and on relevant topics for NCR personnel. These courses shall be equivalent to Hazard 3 Training.

J. Purchase of Additional Equipment

 Proposer shall include a price list for CBRNE equipment, including replacements for existing equipment and new equipment. A list of sample items of interest is included as Exhibit B. Proposer shall include pricing for those items or items of equivalent function as part of the Proposal on as part of the Proposal Form (Section XII).

V. QUALIFICATIONS

- A. The Contractor shall be required to perform calibration and servicing of radiation detection instruments that may contain or require radioactive sources. Contractor must show proof of certification allowing them to perform service on the specified radiological equipment.
- B. The Contractor shall be an authorized seller or reseller of the equipment to be provided. Contractor must show proof of authorization allowing them to sell the specified equipment.
- C. Contractor shall have a demonstrated capability to provide and service the equipment and provide references and history of at least five (5) years of experience providing similar equipment and services to other public agencies.

VI. PERIOD OF PERFORMANCE

- A. The period of performance shall commence upon execution of an awarded contract and continue for two (2) years from that date.
- B. COG may, at its discretion, offer to extend the contract for a period of up to two (2) years per extension period. In no case shall the total duration of any contract awarded extend past eight (8) years from the date of execution. No guarantee is made regarding any period of extension under this contract.

VII. SPECIAL CONDITIONS

- A. The following conditions apply to any Contract resulting from this RFP:
 - 1. In the event the project is terminated by administrative action; Contractor will be paid for work performed prior to the termination of the contract.
 - 2. Any work to be subcontracted to a Subcontractor shall be clearly identified and such Subcontractor shall be approved by COG prior to contract issuance.
 - 3. The Contractor, acting as an independent contractor, shall defend and hold COG harmless from and shall be solely responsible, where found liable, for the payment of all claims for loss, personal injury, death, property damage, or otherwise, arising out of any act of omission or negligence of is employees or agents in connection with the performance of this work.
 - 4. In case of failure by Contactor and/or any Subcontractor to perform the duties and obligations imposed by the resulting contract, COG may, upon written notice, procure the necessary services from other sources and hold Contractor and/or Subcontractor responsible for all additional costs occasioned thereby.
 - 5. Contractor covenants that they presently have no interest, shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this contract. Contractor further covenants that in the performance of this contract, no person having any such interest shall be employed.
 - 6. In submitting a proposal in response to this RFP, and in performing services under any contract resulting from this RFP, Contractor shall be bound by, and comply with, all the terms, conditions, and requirements contained within this RFP, as well as all Exhibits and Attachments.

VIII. PRICES/BILLING

- A. Unless stated otherwise herein, all prices offered by Proposer shall be firm against any increase for the duration of the initial contract period.
- B. Delivery charges, fees, insurance, expenses, and/or overhead shall be included in the total price. Legal fees, of any type, are not allowable without prior written approval of COG.
- C. Contractor shall set up its billing system to ensure that invoices do not include sales tax. COG, and any other using Agencies, will provide certificates of exemption for sales tax upon request.

- D. For all transactions, Contractor shall have a valid W-9 form on file with COG.
- E. Payments shall be made via Electronic Payment, as defined above. Additional details can be found below at Attachment A, Paragraph XIII.

IX. DISADVANTAGED BUSINESS ENTERPRISE (DBE)

- A. Disadvantaged Business Enterprise ("DBE") participation shall be an integral component of the Contractor selection process for this RFP. COG's DBE Policy may be viewed on its website www.mwcog.org. Responding firms shall submit with their proposals a DBE Participation Plan to meet this goal. The plan shall identify any DBE (defined in 49 CFR Part 26) that shall be participating in the project. The plan shall include the name and address of the participating firm, a copy of the firm's current DBE Certification from any federal, state, or local government agency that certifies DBE ownership (please note only DBE certifications will be accepted by COG for this purpose).
- B. COG, in accordance with Title VI of the Civil Rights Act of 1964 and 78 Stat. 252, 42 USC 2000 d 42 and Title 49, Code of Federal Regulations, hereby notifies all Proposers that it will affirmatively ensure that any contract entered pursuant to this advertisement will afford minority business enterprises full opportunity to submit bids in response to this invitation, and will not discriminate on the grounds of race, color, sex, or national origin in consideration for an award.
- C. <u>DBE Assurance</u> The Contractor or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.
- D. A total of 15 possible points (out of a maximum of 100 points) may be awarded for DBE participation, as measured in dollars, either as the Contractor or "Subcontractor". In the event of a tie score between 2 or more proposals, the proposal with the largest percentage of DBE participation, as measured in dollars, will be awarded the contract. DBE points are to be awarded as follows:

PARTICIPATION POINTS

10% to 14%	3
15% to 19%	6
20% to 24%	9
25% to 34%	12
35% or more	15

NOTE: Failure to have DBE participation does NOT disqualify a firm from being awarded a contract.

X. EVALUATION AND SCORING CRITERIA

A. The proposals will be evaluated by a Technical Selection Committee made up of subject matter experts.

B. In evaluating the proposals, the following factors will be considered, with points awarded up to the maximum shown:

Scoring Factor Chart			
Factor	%		
Meter Maintenance Turnaround Times	20		
Ability to Maintain and Service Listed Meters without sending to OEM	20		
Ability to supply the technology and equipment listed in attachments	15		
Ability to provide training programs	20		
DBE Participation	15		
Cost Analysis	10		
TOTAL	100		

XI. PROPOSAL INSTRUCTIONS

- A. Proposals should provide a description of special experience, capabilities, and personnel that will be contributed to this project. The following points should be addressed:
 - 1. A description of Proposer's capabilities to provide and service the required equipment, including details of the pickup, repair, and return process and a timeline for maintenance.
 - 2. Proposer's active authorizations and certifications to sell and maintain the required equipment.
 - 3. A description of training courses provided by Proposer.
 - 4. Proposer's prior experience in providing equipment and services to agencies within or outside the NCR. Include problems faced and how these problems were addressed.
 - 5. A timeline to provide the required tracking system.
- B. The written proposal shall be organized to match these headings. Proposals not meeting the requirements below will be deemed nonresponsive. All pricing information must be contained in File 2.

File 1: Narrative and Technical Proposal [not to exceed 10 MB]

- 1. Letter of Interest
- 2. Table of Contents
- 3. Executive Summary of Proposer
- 4. Proposer's Prior Experience and Background
- 5. Proposer's Capabilities for Repair and Maintenance

- a. Identify all CBRNE detection equipment manufacturers the vendor is capable of performing maintenance and repair.
- 6. Proposer's Capabilities to Provide Training Courses
 - a. Include a representative sample of courses provided, either by Proposer or proposed Subcontractor.
- 7. Proposer's Proposed Tracking System

File 2: Pricing Proposal and Forms [not to exceed 10 MB]

- 1. Proposal Form (Section XIII), including price proposal. Additional pages will need to be included.
- 2. Attachments B, C, and E, completed.
- 3. Certification from any qualified DBE vendors referenced in Attachment E.
- 4. A Certificate of Insurance for Proposer and all proposed Subcontractors (See below).
- C. The requested Letter of Interest must be signed by an authorized principal or agent of the contractor, and provide an overview of Proposer's offer, as well as a name, title, phone number, and email address of the person to whom questions may be directed concerning the proposal.
- D. Proposers <u>must</u> include the additional documentation specified below in their RFP submission or they may be determined to be non-responsive and disqualified.
 - 1. Please complete attached PROPOSER REFERENCES, including three (3) other clients who are being, or have been, provided by the Proposer with similar products, services, and scope of work (Attachment B).
 - 2. Each Proposal shall be accompanied by a NON-COLLUSION AFFIDAVIT regarding price fixing, gratuities, bribery, and discriminatory employment practices. When the Proposer is a corporation, a duly authorized representative shall execute the affidavit (Attachment C).
 - 3. Each Proposal shall be accompanied by a DBE PLAN GOALS SUBMISSION FORM, even if Proposer is not a DBE and does not intend to include DBE subcontractors (Attachment E).
 - 4. Proof of insurance, in the form of an ACORD Form 25, must be provided, demonstrating that Proposer maintains the minimum levels of coverage set forth in the Terms and Conditions (Attachment A). The Certificate of Insurance does not need to name COG as additional insured, but it must show Proposer carries all the required insurance at the required levels.
- E. All Proposals <u>must</u> be completed by responsible company officials and submitted to the COG LOCKBOX on or before the due date and time.

- F. Proposals will not be accepted if submitted through hard copy, mail, courier, fax, email, or any other electronic method except as described below. Proposals submitted through any method other than the COG LOCKBOX system will be rejected.
- G. Proposers shall submit one electronic copy to the COG LOCKBOX system in the following fashion:
 - Registration. To utilize the LOCKBOX service, Proposer must be registered on the Mid-Atlantic Purchasing Team Vendor Registration System ("VRS") portal at https://mwcog.net. If Proposer is not registered, please do this before accessing the LOCKBOX.

2. To register:

- a. Go to the portal at https://mwcog.net and click the Vendors listing the left menu on the page.
- b. Click Register and fill out the form. NOTE: Proposer will need its company information including its TIN/EIN number, if Proposer is a company, or Proposer's SSN, if Proposer is a sole proprietor.
- c. Registering will give Proposer access to the LOCKBOX solicitations.
- H. Submission. Once registered in the VRS system go to the website at https://mwcog.net and click on Solicitation Listings tab.
 - 1. Select "Metropolitan Washington Council of Governments" from the list.
 - 2. Those solicitations utilizing the VRS Lockbox service will be highlighted with a LOCKBOX button.
 - 3. Click on the LOCKBOX button.
 - 4. If Proposer is interested in submitting a response to this solicitation, click on the REQUEST button. After providing the VRS vendor ID and VIN, Proposer will receive a one-time use bid id and password by email which will them give them access to the solicitation documents.
 - 5. Proposer's credentials may be used for the following:
 - a. To upload Proposer's formal proposal response and any additional attachments to the lockbox (before the closing time for the solicitation).
 - Please limit size of individual files to 10 MB.
 - b. To withdraw Proposer's formal response should Proposer desire to cancel its submission or to replace an already uploaded copy with a modified version.
 - c. To verify that the document in the lockbox is the one proposer uploaded.
 - 6. If no vendor ID is provided, Proposer will be directed to the registration page.

- 7. If Proposer wants to ensure that their company details are correct prior to uploading the proposal, then log on to VRS using Proposer's VRS vendor ID and VIN then jump to the vendor summary page in VRS to make any changes desired.
- 8. To return to the COG solicitation page, after registering or updating Proposer's company details, click SOLICITATION LISTINGS button on the VRS home page followed by clicking on the VIEW SOLICITATIONS button for COG on the PENDING SOLICITATIONS page.
- 9. Please do not wait until the last moment to register. If problems occur during registration or submission, please contact COG's provider at customerservice@eepex.com with a copy to purchasing@mwcog.org.
- I. All questions regarding discrepancies, omissions, specifications, instructions, or the required forms may be directed via email no later than ten (10) working days in advance of the deadline to purchasing@mwcoq.org.
 - COG will post any addendum necessary to address questions no later than five (5) working days before the due date of proposals.
- J. It is the responsibility of the Proposer to check if any addenda have been issued. Addenda will be posted at http://www.mwcog.org/purchasing-and-bids/cog-bids-and-rfps/.
- K. Proposal responses should indicate that Proposer has reviewed the latest addenda on the Proposal Form via the Checklist.
- L. Proposers must acknowledge their understanding of all terms listed in this RFP by signing the Proposal Form as part of their submission.
- M. Any variation to the solicitation specifications should be noted by the vendor/contractor as an exception, with an explanation attached to the Proposal Form.
 - 1. Exceptions taken do not obligate COG to change the specifications.
 - 2. In some cases, exceptions may result in the Proposer to be disqualified or result in a lower score in the evaluation process.
 - 3. Failure to report exceptions with the submission may result in disqualification.

(Remainder of page intentionally left blank. Proposal form begins on following page.)

XII. PROPOSAL FORM

TO: Metropolitan Washington Council of Governments

Pricing Matrix

Service and Maintenance

Provide a comprehensive schedule for maintenance costs, including annual maintenance fees and hourly costs for labor for repair.

Equipment

Description	Unit Cost
Biomeme Franklin ISP Thermocycler	
Blackline Safety G6, G7, and G7-EXO monitors	
Dahlgren Decon decontamination solution	
FiberTect decontamination wipes	
Pendar X10 handheld Raman spectrometer	
RedWave Technology Xplorir gas detector	
Teledyne FLIR Griffin G510 Person-Portable GC-MS Chemical Identifier	

For all manufacturers Proposer can supply, attach a list including vendor, and discount off standard price list.

Training Programs

Attach a list of representative offered training programs, with a cost on a per-class basis. Include maximum and minimum number of trainees.

Required Document Checklist

ltems	Acknowledgmer	nt/Attached
Attachment A: Terms and Conditions (acknowledgement)	YES	NO
Attachment B: Proposer's References (completed form)	YES	NO
Attachment C: Non-Collusion/Debarment Affidavit (completed form)	YES	NO
Attachment D: COG Cooperative Rider Clause (acknowledgement)	YES	NO
Attachment E: DBE Plan Goals Submission (completed form)	YES	NO
Proof of Insurance - ACORD Form 25 (Attached to File 2)	YES	NO

*Exceptions Taken (Attach to pricing section)	YES	NO
*If any exceptions are taken, including the Terms and Condsheet(s) at the end of the proposal submission. It is imperasubmission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in order to evaluate the responsiveness of the proposal submission in the p	tive that exceptions be	
Addendums (if applicable)	Acknowled	gement
Addendum #1	YES	NO
Addendum #2	YES	NO
Addendum #3	YES	NO
Others	YES	NO
Payment		
Can accept electronic payments via purchasing card	YES NO	
Signature Section		
I have read, understood, and agreed to the terms and The undersigned agrees to furnish the commodity or above.		
SIGNATURE:		
NAME:		
COMPANY:		
ADDRESS:		
TELEPHONE:		
EMAIL:		

ATTACHMENT A: TERMS AND CONDITIONS

NOTE: COG will not negotiate Terms and Conditions at the time of contract award.

Exceptions MUST be made now.

Failure to do so may disqualify the proposer now or at a later time.

This document sets out provisions generally applicable to Metropolitan Washington Council of Governments ("COG") contracts. The provisions herein do not constitute a complete agreement, and must be appended to a document, executed by all parties, which identifies the specific work to be performed, compensation, term, incorporated attachments, and special conditions, if any.

I. Amendment

This Contract constitutes the entire agreement between the parties and all other communications prior to its execution, whether written or oral, with reference to the subject matter of this Contract are superseded by this Contract. No amendment to this Contract shall be binding unless in writing and signed by the parties.

II. Bankruptcy

Upon filing for any bankruptcy proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assignee for the benefit of creditors, the Contractor must notify COG immediately. Upon learning of the actions herein identified, COG reserves the right at its sole discretion either to cancel the Contract or to affirm the Contract and hold the Contractor responsible for damages. The exercise of this right is in addition to any other rights COG may have as provided in this agreement or by law.

III. Compliance with Law

The Contractor hereby represents and warrants that:

- A. It has the power and authority to enter into and perform the Contract, that the Contract, when executed and delivered, shall be a valid and binding obligation of Contractor, enforceable in accordance with its terms:
- B. Its performance under the Contract shall be in a good and workmanlike manner and in accordance with all applicable professional standards;
- C. It is qualified to do business in the jurisdictions covered by the Contract and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified;
- D. It is not in arrears in the payment of any obligations due and owing to any agency involved in this agreement, including but not limited to the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of this Contract;
- E. It shall comply with all federal, state and local laws, regulations, and ordinances applicable to its activities and obligations under this Contract; and
- F. It shall obtain, at its expense, all licenses, permits, insurance and governmental approvals, if any, necessary to the performance of its obligations under this Contract.

IV. Contingent Fee Prohibition

The Contractor, architect or engineer (as applicable) warrants that it has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Contractor, architect or engineer, to solicit or secure this Contract, and that it has not paid or agreed to pay any person, partnership, corporation or other entity, other than a bona fide employee or agent, any commission, percentage, brokerage or contingent fee or other consideration contingent on the making of this Contract.

V. Counterparts

This Contract may be executed in several counterparts, each of which shall be an original, all of which shall constitute one and the same instrument.

VI. Force Majeure

Neither COG and/or its members nor Contractor shall be held responsible for delay or default caused by fire, riot, acts of God, declaration of emergency, or war where such cause was beyond, respectively, COG's and/or its members or Contractor's reasonable control. COG and/or its members and Contractor shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.

VII. Governing Law

This Contract shall be governed by and construed in accordance with the laws of the District of Columbia without regard to principles of conflicts of law.

VIII. Indemnification

- A. The Contractor shall protect, hold free and harmless, defend and indemnify COG and its members including their officers, agents and employees from all liability, penalties, costs, losses, damages, expenses, causes of action, claims or judgments (including attorney's fees) resulting from injury to, or death of, any person or damage to property of any kind, which injury, death or damage arises out of, or is in any way connected with the performance of the work or failure to perform its obligations under this Contract.
- B. This obligation of indemnification shall apply to any acts or omissions, negligent conduct, whether active or passive, including acts or omissions of Contractor's agents or employees; except that it shall not be applicable to injury, death or damage to the property arising from the sole negligence of COG and/or members, their officers, agents and employees.

IX. Independent Contractor

A. Contractor shall perform the work required by this Contract as an "Independent Contractor." Although COG and/or members reserves the right to determine the delivery schedule for the work to be performed and to evaluate the quality of the completed performance, COG and/or members cannot and will not control the means or manner of the Contractor's performance. The Contractor shall comply promptly with any requests by COG and/or members relating to the emphasis or relative emphasis to be placed on various aspects of the work or to such other matters pertaining to the work under this Contract. Contractor is responsible for determining the appropriate means and manner of performing the work.

- B. Contractor represents and warrants that Contractor is not an employee of COG and/or members, is not currently employed by the Federal Government, and is not an officer, employee or agent of COG and/or members.
- C. Contractor shall be responsible for all federal or state taxes applicable to any compensation or payments paid to Contractor under this Contract. Contractor is not eligible for any federal Social Security, unemployment insurance, or workers' compensation benefits from compensation or payments paid to Contractor under this Contract.
- D. Contractor agrees to immediately provide COG and/or members notice of any claim made against Contractor by any third party. Contractor also agrees not to assign to any third party, without COG's written consent, any obligation of COG to indemnify Contractor for any actions under this Contract.

X. Insurance Requirements

- A. Contractor shall obtain, and at all times keep in effect, Commercial General Liability Insurance in the amounts listed below for its activities and operations. The insurance shall include coverage for personal injury, discrimination and civil rights violation claims. All such insurance shall name COG, individual members, their employees, and agents as ADDITIONAL INSURED. A copy of the certificate of insurance shall be filed with COG and/or members prior to the time any services are rendered. Contractor shall maintain coverage in the amount of \$1,000,000 per occurrence and \$2,000,000 general aggregate and \$500,000 for property damage. Coverage shall be written on an occurrence form.
- B. Contractor shall obtain, and at all times keep in effect, automobile insurance on all vehicles used in this Contract with COG and/or members to protect Contractor against claims for damages resulting from bodily injury, including wrongful death, and property damage that may arise from the operations of any owned or hired automobiles used by Contractor in connection with the carrying out of this Contract. All such insurance shall name COG and/or individual members, their employees, and agents as ADDITIONAL INSURED.
- C. Contractor shall, upon request, provide COG and/or members with certification of Workers' Compensation Insurance, with employer's liability in the minimum amount required the governing jurisdiction's law in effect for each year of this Contract.
- D. Contractor shall obtain and maintain at all times during the prosecution of the work under this Agreement professional liability insurance. Limits of liability shall be \$1,000,000 per claim and \$2,000,000.00 aggregate.
- E. All insurance policies shall have a minimum 30 days' notice of cancellation. Immediate written notice to COG and members involved in the contract shall be required in the event of cancellation or restriction by the insurance company of any insurance policy referred to in this section.
- F. When insurance coverage is renewed, Contractor shall provide new certificates of insurance prior to expiration of current policies to all contracting agencies.

XI. Nondiscrimination

A. A contractor who is the recipient of COG and/or member funds, or who proposes to perform any work or furnish any goods under this Contract shall not discriminate against any worker,

employee or applicant because of religion, race, sex, age, sexual orientation, physical or mental disability, or perceived disability.

B. Contractor further agrees that this provision will be incorporated in all sub-contracts entered into in connection with this Contract.

XII. Ownership of Documents and Materials

- A. The Contractor agrees that all documents and materials, including but not limited to, reports, drawings, studies, specifications, estimates, maps, photographs, designs, graphics, mechanicals, artwork, and computations prepared by or for the Contractor under the terms of this Contract shall at any time during the performance of the services be made available to COG and/or members upon request and shall become and remain the exclusive property of COG and/or members upon termination or completion of the services. These jurisdictions shall have the right to use the same without restriction or limitation and without compensation to the Contractor other than that provided in this Contract. COG and/or members shall be the owner for the purposes of copyright, patent or trademark registration.
- B. If the Contractor obtains or uses for purposes of this Contract, or subcontracts for, any design, device, material, or process covered by letters of patent for copyright, it shall provide an assignment to COG and/or members of ownership for purposes of copyright, patent or trademark and of all right to possess and to use such design, device, material or process and a legally sufficient agreement with the patentee or owner, and a copy of such agreement shall be filed with COG and/or members.
- C. The Contractor shall indemnify and save harmless COG and/or members from any and all claims for infringement by reason of the use of any such patented design, device, materials, or process, or any trademark or copyright, and shall indemnify, protect and save harmless COG and/or members, their officers, agents, and employees with respect to any claim. Action, costs or infringement, for royalties or user fees, arising out of purchase or use of materials, construction, supplies, equipment or services covered by this Contract.

XIII. Payments

Payments to the Contractor pursuant to this Contract shall be made no later than 30 days after receipt of a proper invoice from the Contractor.

<u>Electronic Payment</u> means the payment of money to a vendor by electronic means, including by means of a Purchase Card (P-card) or Automated Clearing House (ACH) funds transfer method.

Contractors will receive payment from the P-Card in the same manner as other credit card purchases. The payments typically are transferred within 48 hours.

Accordingly, contractors must presently have the ability to accept these P-Cards or take whatever steps necessary to implement their ability before the start of the contract term, or contract award.

In some cases, ACH transactions will be acceptable as a form of payment to our vendors. Please keep in mind the turn-around time on ACH transactions can be as long as 30 days.

XIV. Records

A. Contractor shall maintain all fiscal records relating to this Contract in accordance with generally accepted accounting principles. In addition, Contractor shall maintain any other

- records pertinent to this Contract in such a manner as to clearly document Contractor's performance hereunder.
- B. Contractor acknowledges and agrees that the COG and/or members and their duly authorized representatives shall have access to such fiscal records and all other books, documents, papers, plans, and writings of the Contractor that are pertinent to this Contract. All such fiscal records, books, documents, papers, plans, and writing shall be retained by Contractor and kept accessible for a minimum of three (3) years, except as required longer by law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy, or litigation arising out of or related to this Contract, whichever date is later.
- C. All subcontracts shall also comply with these provisions.

XV. Remedies

- A. <u>Corrections of errors, defect and omissions</u>. Contractor agrees to perform the work as may be necessary to correct errors, defects, and omissions in the services required under this Contract, without undue delays and without cost to COG and/or members. The acceptance of the work set forth herein by COG and/or members shall not relieve the Contractor of the responsibility of subsequent corrections of such errors.
- B. Set Off. COG and/or members may deduct from and set-off against any amounts due and payable to the Contractor any back-charges, penalties, or damages sustained by COG and/or members, their agents, employees of recipients of its services, by virtue of any breach of this Contract by the Contractor or by virtue of the failure or refusal of the Contractor to perform the services or any part of the services in a satisfactory manner. Nothing herein shall be construed to relieve the Contractor of liability for additional costs resulting from a failure to satisfactorily perform the services.
- C. <u>Cumulative</u>. All rights and remedies of COG/ members and Contractor shall be cumulative and may be exercised successively or concurrently. The foregoing is without limitation to or waiver of any other rights or remedies of the COG and/or members by law.

XVI. Responsibility of Contractor

- A. The Contractor shall perform the services with the standard of care, skill, and diligence normally provided by a Contractor in the performance of services similar the services hereunder.
- B. Notwithstanding any review, approval, acceptance or payment for the services by COG, the Contractor shall be responsible for the professional and technical accuracy of its work, design, drawings, specifications and other materials furnished by the Contractor under this Contract.
- C. If the Contractor fails to perform the services, or any part of the services, in conformance with the standard set forth in subparagraph A above, it shall, if required by COG and/or members, perform at its own expense and without additional cost to COG and/or members, those services necessary for the correction of any deficiencies or damages resulting, in whole or in part, from the Contractor's failure. This obligation is in addition to and not in substitution for any other remedy available to COG and/or members under the "Remedies" paragraph, or otherwise available by law.

XVII. Severability/Waiver

- A. COG and/or members and Contractor agree that, if any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.
- B. The failure of either party to enforce any provision of this Contract shall not constitute a waiver by that party of that or any other provision of this Contract.

XVIII. Subcontracting or Assignment

The benefits and obligations hereunder shall inure to and be binding upon the parties hereto and neither this Contract nor the services to be performed hereunder shall be subcontracted, or assigned or otherwise disposed of, either in whole or in part, except with the prior written consent of COG and/or members. COG and/or members have the right to withhold such consent for any reason COG and/or members deem appropriate.

XIX. Survival

The terms, conditions, representations, and all warranties contained in this Contract shall survive the termination or expiration of this Contract.

XX. Termination

- A. If the Contractor fails to fulfill its obligations under the Contract properly and on time, or otherwise violates any provision of the Contract, COG and/or members may terminate the Contract by written notice to the Contractor.
- B. The notice shall specify the acts or omissions relied upon as cause for termination.
- C. All finished or unfinished work provided by the Contractor shall, at COG's and/or members option, become COG's and/or member's property. COG and/or members shall pay the Contractor fair and equitable compensation for satisfactory performance prior to receipt of notice of termination, less the amount of damages caused by the Contractor's breach. If the damages are more than the compensation payable to the Contractor, the Contractor will remain liable after termination and COG and/or members can affirmatively collect damages.

XXI. Termination of Contract for Convenience

- A. The performance of work under this Contract may be terminated by COG and/or members, in whole or in part, upon written notice to the Contractor, when COG and/or members determines such termination is in the best interest of COG and/or members. The termination for convenience is effective on the date specified in COG's and/or members written notice.
- B. COG and/or members will pay for all reasonable costs allocable to the Contract for work or costs incurred by the Contractor up to the date of termination. However, the Contractor shall not be reimbursed for any anticipatory profits that have not been earned up to the date of termination.

XXII. Termination of Multi-Year Contract

- A. If COG and/or members fail to appropriate funds or if funds are not otherwise made available for continued performance for any fiscal period of this Contract succeeding the first fiscal period, this Contract shall be cancelled automatically as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either COG's and/or members rights or the Contractor's rights under any termination clause in this Contract.
- B. The effect of termination of the Contract hereunder will be to discharge both the Contractor and COG and/or members from future performance of the Contract, but not from their rights and obligations existing at the time of termination. The Contractor shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the Contract. COG and/or members shall notify the Contractor as soon as it has knowledge that funds may not be available for the continuation of this Contract for each succeeding fiscal period beyond the first.

XXIII. Time is of the essence

Time is of the essence in Contractor's performance of each and every obligation and duty under this Contract.

XXIV. Whole Contract

This Contract constitutes the complete and exclusive statement of the Contract between the parties relevant to the purpose described herein and supersedes all prior agreements or proposals, oral or written, and all other communication between the parties relating to the subject matter of this Contract.

(Revised 5/20/2021)

ATTACHMENT B: PROPOSERS EXPERIENCE/REFERENCES

Name of Proposer	
REFERENCES are to be provided from three (3) other clients who are being or hav been provided by the Proposer similar products, services and scope of work.	е
Complete contact information for each reference, including name, telephone number mailing address and E-mail address, must be included with the Proposal.	r,
A Proposer, which, in the sole judgment of COG, lacks sufficient specific experience may be deemed non-responsible, and may not be considered for award of subseque contract(s)	
1) Firm Name	_
Contact Name	
Address	
Telephone NumberEmail Address	
2) Firm Name	_
Contact Name	
Address	
Telephone NumberEmail Address	
3) Firm Name	_
Contact Name	
Address	
Telephone Number Email Address	

ATTACHMENT C: NON-COLLUSION AFFIDAVIT

DATE
TO: Metropolitan Washington Council of Governments, 777 North Capitol Street, NE, Suite 300 Washington, DC 20002
To Whom It May Concern:
This is to certify that the undersigned Proposer has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this Proposal submitted to the Metropolitan Washington Council of Governments & Mid-Atlantic Purchasing Team.
In addition, the Proposer also certifies that they are in good standing and not on any debarred lists with any government agency including Local, Federal and State Governments.
Bid
Name of Proposer
Signature

Title of Authorized Representative

ATTACHMENT D: COG COOPERATIVE RIDER CLAUSE

The COG Cooperative Purchasing Program works to aggregate the public entity and non-profit purchasing volumes in the National-Capital region of Maryland, Virginia and Washington, D.C.

I. Format

A. COG serves as the Lead Agency of this procurement and has included this Cooperative Rider Clause indicating its willingness to allow other public entities to participate in this procurement ("Participating Agency") pursuant to the following Terms and Conditions.

II. Terms

- A. A Participating Agency, through their use of this Cooperative Rider Clause, agree to the terms and conditions of the resulting contract to the extent that they can be reasonably applied to the Participating Agency.
- B. A Participating Agency may also negotiate additional terms and conditions specific to their local requirements upon mutual agreement between the parties.

III. Other Conditions - Contract and Reporting

- A. The resulting contract shall be governed by and "construed" in accordance with the laws of the State/jurisdiction in which the Participating Agency is officially located.
- B. Contract obligations rest solely with the Participating Agency only.
- C. Contractor must provide semi-annual contract usage reporting information to COG, including but not limited to quantity, unit pricing and total volume of sales by entity on demand and without further approval of Participating Agency;
- D. <u>Semi-annual reporting Due Dates beginning from Contract execution</u>:
 - 1. November 30, covering May 1 October 31
 - 2. May 31, covering November 1 April 30
- E. Contractor is required to report any Participating Agency that is added to the contract and a **COG Rider Clause Approval Form** must be filled out by the Participating Agency and approved by COG (see form below).
- F. Significant changes in total contract value may result in further negotiations of contract pricing with the Lead Agency and any Participating Agency.
- G. Although Participating Members (see next page) are the priority of this rider clause, organizations not on this list are permitted to use this clause by mutual agreement and approval by COG.

II. Participating Members

COG Member Governments

District of Columbia

Maryland

- · Town of Bladensburg
- · City of Bowie
- City of College Park
- Charles County
- · City of Frederick
- Frederick County
- City of Gaithersburg
- City of Greenbelt
- City of Hyattsville
- City of Laurel
- Montgomery County
- Prince George's County
- · City of Rockville
- City of Takoma Park

Virginia

- · City of Alexandria
- Arlington County
- City of Fairfax
- Fairfax County
- City of Falls Church
- Loudoun County
- City of Manassas
- City of Manassas Park
- Prince William County

Other Local Governments

- Town of Herndon
- Spotsylvania County
- Stafford County
- Town of Vienna

Public Authorities/Agencies

- Alexandria Renew Enterprises
- District of Columbia Water and Sewer Authority
- Metropolitan Washington Airports Authority
- Montgomery County Housing Opportunities Commission
- Potomac & Rappahannock Transportation Commission/ Omni Ride
- Prince William County Service Authority
- Upper Occoquan Service Authority

- Washington Metropolitan Area Transit Authority
- Washington Suburban Sanitary Commission

School Systems

- Alexandria Public Schools
- Arlington County Public Schools
- Charles County Public Schools
- District of Columbia Public Schools
- Frederick County Public Schools
- Loudoun County Public Schools
- City of Manassas Public Schools
- Montgomery College
- Montgomery County Public Schools
- Prince George's County Public Schools
- Prince William County Public Schools
- Spotsylvania County Schools
- Winchester Public Schools

State Agencies

 Maryland-National Capital Park and Planning Commission

BALTIMORE METROPOLITIAN COUNCIL

- City of Annapolis
- Anne Arundel County
- Anne Arundel County Public Schools
- Anne Arundel Community College
- City of Baltimore
- Baltimore City Public Schools
- Baltimore County
- Baltimore County Public Schools
- Community College of Baltimore County
- Carroll County
- Harford County
- Harford County Public Schools
- Harford Community College
- Howard County
- Howard County Public Schools System
- Howard Community College
- Queen Anne's County
- Queen Anne's County Public Schools

COG Rider Clause Approval Form

This form must be executed for any Participating Agency, both within and outside of the Metropolitan Washington Council of Governments (COG) region, to use the COG Cooperative Rider Clause to ride solicitations and contracts.

NOTE: Effective January 1, 2019, COG does not authorize the use of the MAPT/COG Cooperative

Rider Clause without this form being completed and approved. Participating Agency Name _____ Contact Person _____ Phone _____Email Address _____ Solicitation/Contract Information: Name Solicitation/Contract ______ Lead Agency/Contract Holder _____ Contact Person _____ Solicitation/Contract Number _____ Other Reference _____ Vendor Information: Contractor Name _____ Address _____ City/State/Zip _____ Contact Person _____ Phone _____Email Address _____ See questions on next page.

	Questions -		<u>YES</u>	<u>NO</u>
1.	Is the Contract active and currently in force?			
	Is the Participating Agency's specifications/scope y similar to that in the Contract?	of work the same or		
3. Is riding this Contract within the rules and regulations of the Participating Agency and approved by the Participating Agency's Purchasing Department?				
<u>Paı</u>	rticipating Entity	Metropolitan Washington Council of Governments		
Na	me	Name		_
Titl	e	Title		_
Sig	nature	Signature		

ATTACHMENT E: DBE PLAN GOALS SUBMISSION

DBE Participation YES ____ NO ____ (Please Check One) **PROPOSER** Name: **Total Proposed Budget** Value: \$ _ **DBE Plan** Yes ____ No ____ **Check if Prime Contractor is** a DBE _____ . Certification Certification #_____ Expiration Date: _____ Form Must Be Attached to this form. Certification Type: DBE (must be DBE) **DBE Certification** Certifying Agency: _ DBE SUBCONTRACTOR 1 Name: _ **Street Address** Tax ID #: ___ Website: _____ City, State, Zip Name: _____ Title: _____ POINT OF CONTACT Email: _____ Telephone: _____ Percentage of total _____% **Subcontract Value** Cost \$_____ End ___/___ **DBE Performance Period** Start ___/___ Certification Type: DBE (must be State: _____ DBE) **DBE Certification** Certifying Agency: _____ **Certification Form Must Be** Certification #____ Expiration Date: _____ Attached to this form Copy for additional DBE subcontractors **DBE SUBCONTRACTOR 2** Name: _ **Street Address** Tax ID #: ___ Website: ____ City, State, Zip Name: _____ POINT OF CONTACT Title: ____ Telephone: _____ Email: _____ Cost \$_____ Percentage of total _____% Subcontract Value

DBE Performance Period	Start/	End//			
DBE Certification	State: Certification Type: DBE (must I DBE)				
DDL GOTATIONATOR	Certifying Agency:				
Certification Form Must Be Attached to this form	Certification #	Expiration Date:			
	Copy for additional DBE subcontractors				
DBE SUBCONTRACTOR 3	DBE SUBCONTRACTOR 3 Name:				
Street Address		Tax ID #:			
City, State, Zip		Website:			
POINT OF CONTACT	Name:	Title:			
	Email:	Telephone:			
Subcontract Value	Cost \$	Percentage of total%			
DBE Performance Period	Start/	End/			
DBE Certification	State:	Certification Type: DBE (must be DBE)			
	Certifying Agency:				
Certification Form Must Be Attached to this form	Certification #	Expiration Date:			
	Copy for additional DBE subcontractors				
DBE SUBCONTRACTOR 4	Name:				
Street Address		Tax ID #:			
City, State, Zip		Website:			
POINT OF CONTACT	Name:	Title:			
Toma or common	Email:	Telephone:			
Culting interest Value					
Subcontract Value	Cost \$	Percentage of total%			
DBE Performance Period	Start/	End//			
DBE Certification	State:	Certification Type: DBE (must be DBE)			
	Certifying Agency:				
Certification Form Must Be Attached to this form	Certification #	Expiration Date:			
	Copy for additional DBE subcontractors				

EXHIBIT A: COG HAZMAT INVENTORY

Category	Brand	Model	Location	# of Devices	Unit
Flame Spectroscopy	Proengin	AP2C	Alexandria	1	НМ
					210
Flame Spectroscopy	Proengin	AP4C	Alexandria	1	HM
					210
Flame Spectroscopy	Proengin	AP2C	Arlington	1	HM
					109
Flame Spectroscopy	Proengin	AP4C	Arlington	1	HM
					109
Flame Spectroscopy	Proengin	AP2C	DC	4	HMU
Flame Spectroscopy	Proengin	AP4C	DC	2	HMU
Flame Spectroscopy	Proengin	AP2C	Fairfax	2	HM
					440
Flame Spectroscopy	Proengin	AP4C	Fairfax	2	HM
-1 -					440
Flame Spectroscopy	Proengin	AP2C	Loudoun	1	HM
		1510		4	619
Flame Spectroscopy	Proengin	AP4C	Loudoun	1	HM
Flama Constant	D	A D.3.C	NA t	2	619
Flame Spectroscopy	Proengin	AP2C	Montgomery	2	HM 807
Flame Spectroscopy	Proengin	AP4C	Montgomery	2	HM
riaine Spectroscopy	Proengin	AP4C	ivioritgornery		807
Flame Spectroscopy	Proengin	AP2C	MWAA	2	HM
Tiame Spectroscopy	riochgin	AIZC	IVIVAA		301
Flame Spectroscopy	Proengin	AP4C	MWAA	2	HM
l iame opecaroscopy	1100118	/		_	301
Flame Spectroscopy	Proengin	AP2C	Prince Georges	1	HM
,					716
Flame Spectroscopy	Proengin	AP4C	Prince Georges	1	НМ
					716
Flame Spectroscopy	Proengin	AP2C	Prince William	1	НМ
					506
Flame Spectroscopy	Proengin	AP4C	Prince William	1	HM
					506
Freon Detector	MSA	Bacharach	Alexandria	1	HM
		PGM-IR			210
Freon Detector	MSA	Bacharach	Arlington	1	HM
Francis Della d	1464	PGM-IR			109
Freon Detector	MSA	Bacharach PGM-IR	DC	2	HMU
Freon Detector	MSA	Bacharach	Fairfax	2	НМ
		PGM-IR			440

Category	Brand	Model	Location	# of Devices	Unit
Freon Detector	MSA	Bacharach PGM-IR	Loudoun	1	HM 619
Freon Detector	MSA	Bacharach PGM-IR	Montgomery	2	HM 807
Freon Detector	MSA	Bacharach PGM-IR	Prince Georges	1	HM 716
Freon Detector	MSA	Bacharach PGM-IR	Prince William	1	HM 506
FTIR/Raman	Thermo	FTXi	Alexandria	1	HM 210
FTIR/Raman	Thermo	Gemini	Alexandria	1	HM 210
FTIR/Raman	Thermo	Gemini	Arlington	2	HM 109
FTIR/Raman	Thermo	Gemini	DC	2	HMU
FTIR/Raman	Thermo	FTXi	Fairfax	1	HM 440
FTIR/Raman	Thermo	RMX	Fairfax	1	HM 440
FTIR/Raman	Thermo	Gemini	Loudoun	1	HM 619
FTIR/Raman	Thermo	FTXi	Montgomery	2	HM 807
FTIR/Raman	Thermo	RMX	Montgomery	2	HM 807
FTIR/Raman	Thermo	Gemini	MWAA	2	HM 301
FTIR/Raman	Thermo	FTXi	Prince Georges	1	HM 716
FTIR/Raman	Thermo	RMX	Prince Georges	1	HM 716
FTIR/Raman	Thermo	FTXi	Prince William	1	HM 506
FTIR/Raman	Thermo	RMX	Prince William	1	HM 506
GC/MS	FLIR	G510	DC	1	HMU
High-Pressure Mass Spec	908Devices	MX908	Alexandria	1	HM 210
High-Pressure Mass Spec	908Devices	MX908	Arlington	1	HM 109
High-Pressure Mass Spec	908Devices	MX908	DC	2	HMU
High-Pressure Mass Spec	908Devices	MX908	Fairfax	1	HM 440

Category	Brand	Model	Location	# of Devices	Unit
High-Pressure Mass Spec	908Devices	MX908	Loudoun	1	HM 619
High-Pressure Mass Spec	908Devices	MX908	Montgomery	2	HM 807
High-Pressure Mass Spec	908Devices	MX908	MWAA	2	HM 301
High-Pressure Mass Spec	908Devices	MX908	Prince Georges	1	HM 716
High-Pressure Mass Spec	908Devices	MX908	Prince William	1	HM 506
IMS	Environics	ChemProX	Alexandria	2	HM 210
IMS	Environics	ChemProX	DC	5	HMU
IMS	Environics	ChemProX	Fairfax	2	HM 440
IMS	Smiths Detection	LCD 3.3	Fairfax	1	HM 440
IMS	Environics	ChemProX	Montgomery	1	HM 807
IMS	Smiths Detection	LCD 3.3	MWAA	2	HM 301
IMS	Environics	ChemProX	Prince Georges	1	HM 716
IMS	Smiths Detection	LCD 3.3	Prince Georges	1	HM 716
IMS	Environics	ChemProX	Prince WIlliam	1	HM 506
Mercury Vapor Analyzer	Brookfield Ametek	J505	Alexandria	1	HM 210
Mercury Vapor Analyzer	Brookfield Ametek	J505	Arlington	1	HM 109
Mercury Vapor Analyzer	Brookfield Ametek	J505	DC	2	HMU
Mercury Vapor Analyzer	Brookfield Ametek	J505	Fairfax	2	HM 440
Mercury Vapor Analyzer	Brookfield Ametek	J505	Loudoun	1	HM 619
Mercury Vapor Analyzer	Brookfield Ametek	J505	Montgomery	2	HM 807
Mercury Vapor Analyzer	Brookfield Ametek	J505	Prince Georges	1	HM 716
Mercury Vapor Analyzer	Brookfield Ametek	J505	Prince William	1	HM 506
Multi Gas Detection	RAE Systems	MultiRae Lite	Alexandria	6	HM 210

Category	Brand	Model	Location	# of	Unit
				Devi ces	
Multi Gas Detection	RAE Systems	AreaRae	Alexandria	2	НМ
					210
Multi Gas Detection	RAE Systems	MultiRae Lite	Arlington	6	HM 109
Multi Gas Detection	RAE Systems	AreaRae	Arlington	2	HM
Width Gus Beteethon	TWE SYSTEMS	Alleanae	Allington		109
Multi Gas Detection	RAE Systems	MultiRae Lite	DC	34	HMU
Multi Gas Detection	RAE Systems	AreaRae	DC	8	HMU
Multi Gas Detection	RAE Systems	Qrae3	DC	10	HMU
Multi Gas Detection	RAE Systems	ToxiRae Pro (CL and CO2)	DC	7	HMU
Multi Gas Detection	RAE Systems	MultiRae Lite	Fairfax	10	HM 440
Multi Gas Detection	RAE Systems	AreaRae	Fairfax	4	HM 440
Multi Gas Detection	RAE Systems	MultiRae Lite	Loudoun	2	HM
					619
Multi Gas Detection	RAE Systems	AreaRae	Loudoun	2	HM 619
Multi Gas Detection	Draeger	X-Act 5000	Loudoun	2	HM
	DAE C L	AA USB LS	N4 1	10	619
Multi Gas Detection	RAE Systems	MultiRae Lite	Montgomery	10	HM 807
Multi Gas Detection	RAE Systems	AreaRae	Montgomery	2	HM 807
Multi Gas Detection	Draeger	X-Act 5001	Montgomery	2	HM 807
Multi Gas Detection	Draeger	X-Act 7000	Montgomery	2	HM 807
Multi Gas Detection	RAE Systems	MultiRae Lite	MWAA	4	HM 301
Multi Gas Detection	RAE Systems	AreaRae	MWAA	2	HM 301
Multi Gas Detection	RAE Systems	MultiRae Lite	Prince Georges	20	HM 716
Multi Gas Detection	RAE Systems	AreaRae	Prince Georges	1	HM 716
Multi Gas Detection	RAE Systems	MultiRae Lite	Prince William	4	HM 506
Multi Gas Detection	RAE Systems	AreaRae	Prince William	1	HM 506
Rad Detection	Ludlum	Ludlum 2241	Alexandria	3	HM 210
Rad Detection	Ludlum	Ludlum 2242	Arlington	1	HM 109

Category	Brand	Model	Location	# of Devices	Unit
Rad Detection	Ludlum	Ludlum 2243	Fairfax	6	HM 440
Rad Detection	Ludlum	Ludlum 2244	Loudoun	3	HM 619
Rad Detection	Ludlum	Ludlum 2245	Montgomery	4	HM 807
Rad Detection	Ludlum	Ludlum 2246	MWAA	2	HM 301
Rad Detection	Ludlum	Ludlum 2247	Prince William	3	HM 506

EXHIBIT B: SAMPLE SPECIFICATION ITEMS

The following items are included as samples of products that may be purchased under this specification. Proposers shall include pricing for these items or equivalent as part of their proposal. Brochures for these items are included.

- Biomeme Franklin ISP Thermocycler
- Blackline Safety G6, G7, and G7-EXO monitors
- Dahlgren Decon decontamination solution
- FiberTect decontamination wipes
- Pendar X10 handheld Raman spectrometer
- RedWave Technology Xplorir gas detector
- Teledyne FLIR Griffin G510 Person-Portable GC-MS Chemical Identifier



Scale your field-forward defense capabilities with molecular testing in the palm of your hand.

Originally developed for the US Government, Biomeme's Franklin™ ISP thermocycler and ISP test cartridges provide you with a field-forward, lightweight, hand-held, internal battery-powered, small footprint packable, decentralized molecular lab with integrated sample prep enabling multiplex real-time target detection and differentiation any place, any time. Available for your CBRN, Human Diagnostic, Industrial Hygiene, Vector Surveillance, and Environmental Health CONOPS.

Unique Advantages to Support Your Scale-Up

In addition to the benefits below, Biomeme manufactures its tests domestically in the United States further securing it's supply chain.



Field Ready

Decentralize your Lab. On the go and in the field.

- Runs on internal battery/ 60hz AC PWR
- Standard MilSpec battery pack compatible
- Solar to DC Converter compatible



Maximum Shelf-Stability

Hand-held DNA analysis with shelf-stable reagents that are lyophilized for maximum shelf-life.

 Single-use ISP test cartridges include all required multiplexed molecular assay components



Ultra-Portable Design

Compact, lightweight, and optimized to enable a full day's work in the field on a single charge. Easy to use with minimal steps.

- Weighs 4.2 lbs/1.9 kg
- 185.67 mm W x 128.5875 mm H x 114.11 mm



Gold Standard Performance

Performs lab-quality testing at the point of need, but requires no laboratory equipment or special experience.



Rapid Results

Sample-to-answer in 30~60min, depending on test.



Easily Adaptable

Flexibility to create customized assays and sample prep protocols quickly to meet your needs.

CURRENTLY AVAILABLE TESTS

Biological Warfare Panel*

Instrument SKU: 1000009 Consumable SKU: 3000140 14 Biowarfare agents targeted

- Bacillus anthracis
- Botulinum neurotoxin A
- Botulinum neurotoxin B
- Brucella species
- Burkholdera mallei
- Burkholdera pseudomallei
- Coxiella burnetii
- Francisella tularensis

- Orthopox viruses
- Ricin toxin gene
- Staphylococcal enterotoxin B gene
- Variola virus
- Venezuelan equine encephalitis virus
- · Yersinia pestis

Biological Warfare Simulant Panel*

SKU: 3000141

3 Biowarfare simulant organisms targeted

- Bacillus thuringiensis subsp. kurstaki
- Bacillus thuringiensis subsp. israelensis
- Bacillus globigii

Biological Warfare Training Panel*

SKU: 3000514

Keep current on your test sampling and running techniques. These cartridges contain all of the items needed to provide training for real-world scenarios. The training cartridge is a single-use mock test cartridge that looks and functions like an authentic ISP test cartridge, but does not contain expensive, short-lived reagents.

TESTS AVAILABLE IN 2023

Water-Borne Pathogen Panel

SKU: 3000626R

9 pathogens targeted

- Cryptosporidium spp.
- Enterococcus faecalis
- Escherichia coli
- Giardia spp.
- Human fecal indicator bacteria
- Legionella spp.
- Listeria monocytogenes
- Salmonella enterica
- Schistosomatidae

Food-Borne Pathogen Panel

SKU: 3000635R

15 pathogens targeted

- Campylobacter spp.
- Clostridium Perfringens
- Clostridium Botulinum
- Clostridium Difficile
- Escherichia coli
- Escherichia coli 0157:H7
- Listeria monocytogenes
- Norovirus

- Salmonella enterica
- Shiga toxin-producing E.coli (STEC)
- · Shigella spp.
- Vibrio cholerae
- Vibrio parahaemolyticus
- Vibrio vulnificus
- Yersinia enterocolitica

Mosquito Vector-Borne Pathogen Panel

SKU: 3000506

5 pathogens targeted

- Yellow fever virus
- Chikungunya virus
- Dengue virus

- Zika virus
- Plasmodium (Malaria)

XCEL™ Respiratory Test

SKU:3000631R

3 pathogens targeted

- SARS-CoV-2 Orf1ab and N genes
- Influenza A virus
- Influenza B virus

Host Response: HR-B/V

SKU: 3000513

25 gene targets and controls to differentiate whether someone's respiratory infection is bacterial or viral using a simple fingerstick blood sample.

*These defense articles are controlled for export under the International Traffic in Arms Regulations (ITAR), administered by the U.S. Department of State, Directorate of Defense Trade Controls. The transfer of any hardware or technical data controlled by the ITAR to any unauthorized persons, requires prior written approval for from the U.S. Department of State.



For Research Use Only. Not for use in human or veterinary diagnostics. IVD products are currently in development at Biomeme and not yet available for sale in the US. Biomeme products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or provide a service to third parties without the written approval of Biomeme, Inc.

Mike Langley

mike.langley@biomeme.com DUNS # 079110357 Cage Code 6YZ39











HARNESS SPEED AND VISIBILITY WHEN SECONDS COUNT

Whether it's a chemical fire, flood, gas leak, explosion or any other potentially devasting situation, fire and hazmat teams are first on the ground to respond. Teams need to act quickly, share information across multiple stakeholder groups and stay one step ahead of evolving risk.

So, when getting up and running fast is critical, when connectivity is vital and when maximum visibility into the scenario and those responding is paramount, Blackline Safety's cloud-connected personal and area gas monitors are the quick, comprehensive and reliable solution for the job.

And they free you up to do your job: **focusing on the situation, not the equipment.**







of connected safety technology protects over 150,000 people, including fire, hazmat and emergency responders.

Our next generation

THE POWER OF CONNECTED SAFETY

Industry-Leading Technology

Blackline's all-in one connected gas detection hardware offers the capabilities and customization you need to transform the safety and efficiency of your fire and hazmat responses.

And with add-on value through real-time monitoring and data analytics software, your responses are easier to manage and generate better data for better decisions along the way.





FAST DEPLOYMENT

Instant connectivity gets you up and running in mere minutes so you can understand the situation—and the on-the-ground risks—right away.



FULL VISIBILITY

Incidents can change rapidly. Devices stream real-time data to generate real-time situational awareness that facilitates informed decision-making.



COMMAND FROM ANYWHERE

Position your command center and direct responders from anywhere thanks to Blackline Live web-based monitoring platform.



ON-THE-GO FLEXIBILITY

Prepare for an incident, or change gas detector configurations as it changes, with swappable gas sensor cartridges.



COMMUNICATE WITH CONFIDENCE

Share real-time reports across first responders to enhance coordination, planning and preparation for worst-case scenarios, as well as limited view reports for other stakeholders like local, state or federal agencies.



AUTOMATED ANALYTICS

Use actual data—not only subjective info from teams in the hotwash—to analyze the response and find areas for improvement with a comprehensive suite of reports on usage, exposure levels, alerts and more.

CASE STUDY

REAL-TIME AWARENESS BOOST HAZMAT TEAM RESPONSE

Discover how an urban fire department in the U.S. used Blackline Safety technology to respond to a dangerous ammonia leak with speed and precision.





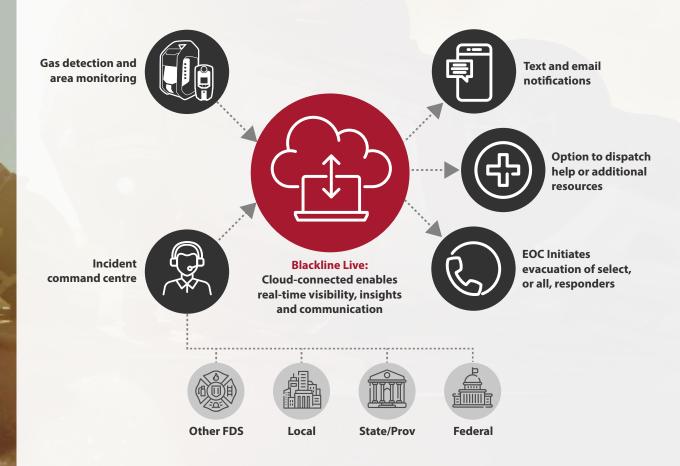
CONNECTED SAFETY IN ACTION

Remote Visibility, On-The-Ground Protection

During an incident, Blackline Safety's G6 and G7 wearables and G7 EXO area gas monitors give you instant visibility of worker locations and gas readings around them, even in remote locations.

Devices have integrated location technology and cellular connectivity, with optional satellite connectivity, streaming live data so the command center is never out of touch and continuously informed.

Even if the incident spreads out over many miles, G7 and G7 EXO keeps the command team connected as if they were on the scene.





With Blackline Safety's connected gas detection tools supporting our hazmat team, I was confident we all had the critical information we needed to make decisions and target our response. I was able to monitor the entire situation as it happened remotely from my cell phone.

HIGH PERFORMANCE SOLUTION

Blackline Safety's all-in-one devices have the connectivity, gas detection and real-time visibility you need to meet the needs of any fire and hazmat response. And with customizable capabilities to handle even the most at-risk situations your responders face, safety and efficiency is enhanced.

Add-on value through data analytics—all through a single partner– means your operations can be more insightful, comprehensive and easier-to manage.

REAL-TIME GAS PLUME MODELING

Get ahead of chemical releases by combining Blackline's connected devices with Vlahi's web- and smartphone-based CERES plume modeling software. Estimate a release's speed, size and direction of spread to deploy your resources more effectively and strategically.

blacklinesafety.com/plume



Join 1,900+ brands that use Blackline Safety, including these fire departments.





























CASE STUDY

FIRE DEPARTMENT USES GAS DETECTORS TO SAVE LIVES

Discover how connected gas detectors helped contain a dangerous fuel spill in a southern U.S. city.

blacklinesafety.com/fuel



blacklinesafety

blacklinesafety.com/fire

NORTH AMERICA

TOLL-FREE 1.800.486.8889 | sales@blacklinesafety.com

EUROPE

PHONE 44.1787.222684 | eusales@blacklinesafety.com

INTERNATIONAL

PHONE 1.403.451.0327 | sales@blacklinesafety.com



FAST THOROUGH **DECON**

Dahlgren Decon™ is a three-component decontamination solution that can quickly decontaminate most chemical warfare agents, toxic materials, and other emerging threats including fentanyl, ricin, meth and more.

In testing conducted by the U.S. Department of Defense and other federal agencies, Dahlgren Decon has been found to be the most effective and fastest reacting decontaminant on the market.

FORM FACTORS

DAHLGREN DECON HIGHLIGHTS

- Neutral pH level
- Works with detectors, no false positives
- 10+ year shelf life
- Non-corrosive
- Non-flammable
- Non-toxic by-products, safe for disposal after use
- Use in any sprayer available
- Use & store in temperatures from -40°F to 160°F (-40°C to 71°C)
- Point-of-use, Tailorable Decon

Dahlgren Decon is supplied as three individual components, mixed by the end user, and then loaded into any spray applicator of choice. Applicators can be supplied as part of a kit, when desired, for an additional cost. Please speak to a representative at First Line Technology for more information. Available form factors include 200 mL, 22 Oz, and 5 L configurations.

Dahlgren Decon is Licensed from Department of the Navy under U.S. Patent Nos. 7,064,241, 7,718,594, and 7,829,520



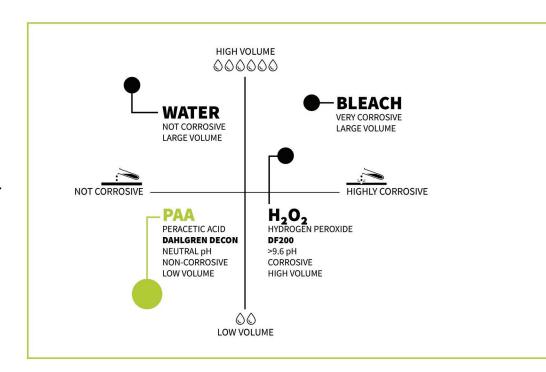
DA-LGRENDECON

Dahlgren Decon offers the lowest total cost of decontamination in most scenarios, is the fastest reacting and most effective broad-spectrum decontamination solution available.

DECON LANDSCAPE

Dahlgren Decon reduces the time to mix, apply, dwell, and cleanup which means the threat has less time to cause damage that would require the equipment or infrastructure to be discarded.

Dahlgren Decon has a higher efficiency in neutralizing larger areas of coverage with smaller volumes of solution than water, bleach, or hydrogen peroxide.





DECON FIELD GUIDE

Everything you need to know about Dahlgren Decon in the palm of your hand. The Decon Field Guide gives registered users access to:

- + Full threat library
- Dahlgren Decon functionality against bulk contamination & contaminated surfaces
- Reactivity concerns, suggested ratios, & dwell times defined
- Full Dahlgren Decon configuration instructions









SIMPLE IMMEDIATE DECON

Dry decontamination using FiberTect® can remove bulk contaminants faster, more efficiently, and with less clean up than traditional wet decon techniques.

The FiberTect® decontamination wipe can serve as a standalone technology or used effectively as the first step of a larger decontamination system.

FIBERTECT® HIGHLIGHTS

- + 15 year shelf life
- + Locks in toxic vapors
- + Effective removal of acids and bases

EFFECTIVE REMOVAL OF



CWAs

>95% reduction of chemical agents on most surfaces



BWAs

Physically removes vegetative bacteria, fungi, and viruses



TICs/TIMs

Physically removes from surfaces and traps toxic vapors within the activated carbon layer



RADIOLOGICAL CONTAMINANTS

Removes particulates from surfaces including PPE

EFFECTIVE REMOVAL ON



PERSONNEL



WEADONS





PPE



THREE LAYER DESIGN

FiberTect's® unique three-layer design provides responders with a flexible, highly absorptive, and broad-spectrum protective fabric system. FiberTect® is self-contained and packaged for easy use, storage, and transport especially in cold weather operations.





FORM FACTORS

- + MITTS allow for easy clean-up of bulk chemicals on people, weapons, and sensitive equipment and can be used over protective gloves.
- + WIPES are versatile pieces of cut cloth that come individually sealed and can be used in a variety of dry decon situations. Available in multiple sizes.
- + **ROLLS** are made for bulk decontamination and provide users a tailored dry decon solution.
- + SHUFFLE PITS combine the function of a decon pool with the capability of dry decontamination to capture and reduce the spread of contaminants. Shuffle Pits are reusable, inter-operable with others on the market, and allow for decon within a 3' x 3' or 4' x 4' footprint.

TESTING AND DEVELOPMENT

Lawrence Livermore National Laboratories (LLNL) testing proved FiberTect® **SUPERIOR** in all testing results against 30 comparable products for removal of toxic chemical warfare agents, TICs, and TIMs.



Sulfur Mustard: **Outperformed** all 30 other sorbents for absorptive capacities directly from skin (95% removal) and absorptive capacities, including current military M291 sorbents.



Methyl Parathion (organophosphate): **Outperformed** all sorbents for absorptive and adsorptive capacities.



70% Nitric Acid, 70% Sulfuric Acid, 10% Sodium Hypochlorite, and P-Xylene: No material degradation.



Water and P-Xylene: **Outperformed** other sorbents for both hydrophilic and hydrophobic absorptive capabilities.



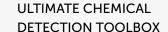


GRIFFIN™ G510

Person-Portable GC-MS Chemical Identifier



The Griffin™ G510 Gas Chromatograph Mass Spectrometer (GC/MS) is a versatile, person-portable chemical identifier. It complements presumptive techniques used during emergency missions, by enabling responders to analyze all phases of matter (liquid, solid, vapor) and by performing rapid field- confirmation of chemical hazards. The integrated heated sample probe enables hot zone operators to identify vapor-phase chemical threats within seconds when operated in Survey Mode. The integrated split/splitless injector allows for environmental, forensic, and hazardous material sampling via syringe injection of organic liquids. The 9" on-board touchscreen displays guided user prompts and can be operated while wearing full personal protective equipment (PPE) downrange. It is built with an IP65-rated enclosure for harsh environments and supports passive defense, interdiction, elimination, and consequence management missions. Long-lasting, on-board batteries ensure every mission is supported from beginning to end.



Versatile in-field sampling options for vapor, liquid, and solid samples

- Vapor sampling probe with rapid-response survey mode
- Integrated split/splitless liquid injector accepts direct injection of organic liquids
- Available Prepless Sample Introduction (PSI) Probe, Sample Prep Kit (SPK), and Touch-And-Go (TAG™) capability for direct analysis of solid samples
- Effortlessly links with SPME and headspace sample collection tools
- High-fidelity, low thermal mass (LTM)
 GC column for unsurpassed resolution in challenging environments







BUILT FOR EVERYONE, BUILT FOR EVERYWHERE

Completely self-contained and mission-ready from the field to the lab

- IP65-rated, dust-tight and spray-resistant
- Built-in active pumping system eliminates need for an external service module
- Integrated carrier gas, batteries, and training reference videos
- Simple field maintenance activities for increased uptime
- Extensive training, service, and reachback options available
- Optional vehicle mount kit for shock and vibration protection during off-road or harsh transport

MASS SPEC PERFORMANCE REDEFINED

Confidently identify unknowns and take action with guided prompts and simple threat alarms

- Laboratory level, gold-standard linear quadrupole mass analyzer
- Full NIST and SWGDRUG on-board libraries provide confirmatory identification and analysis of trace compounds, unknown chemicals, and mixtures
- Simple on-board touchscreen with navigation assistant and Method Selector tool
- Visual and audible alarm confirmation with limited data interpretation
 On-board WiFi and GPS assist in maintaining result
- Remote monitoring and control with WiFi hotspot

defensibility



SPECIFICATIONS

Griffin G510

Technology

Dimensions (LxWxH)

Gas Chromatography/Mass Spectrometry (GC/MS)

13.25 x 13.25 x 15.75 in (33.7 x 33.7 x 40 cm) - includes batteries, carrier gas, and vacuum system

36 lbs (16.3 kg) - includes batteries, carrier gas,

and vacuum system

Optional Vehicle Mount Kit

(LxWxH)

Weight

Road-Ready Version: 16.7 x 14 x 15.2 in (with G510 installed) - Off-Road Version: 16.7 x 17.5 x 16.2 in (with G510 installed)

Operating Temp / Humidity 32 to 104 °F (0 to 40 °C): <95% relative humidity

Storage Temp -13 to 131 °F (-25 to 55 °C)

Decontamination Sealed for Survey Mode operation in hot-zone; IP65-rated

enclosure is dust-tight and spray-resistant

100-240V 50-60Hz (220 W max); 19V (DC); 2 x #2590 @ 15V Li Power Supply

Ion batteries (included)

Battery Life 4 hrs in Survey Mode, 2 hrs in Confirmation Mode;

hot swappable

Start Up Time 15 minutes to full operation from cold Calibrant On-board FC-43 (Perfluorotributylamine)

Carrier Gas On-board helium; external helium connector, automatic

switching (Hydrogen capable)

System Interface

Display 9" Multitouch Color Display

(1280x720 WVGA;1300 nits brightness)

Alerts Audible and visual (touchscreen and handheld probe)

Software GSS Level 1 Touch: multiple user levels

2 x USB 2.0, Bluetooth 4.0, WiFi 802.11n, Ethernet via USB, Communication

integrated GPS

Internal ≥128GB SSD Data Storage

Training Requirements 2 hours basic operation; 8 hours Operator Certification

Sampling & Identification

Sample Phase Sample Introduction Solid, liquid, and vapor

Heated Sample Probe (included standard):

- Vapor survey mode via Membrane Introduction Mass

Spectrometry (MIMS) Inlet

- Vapor confirmation via Internal Dual-Bed Preconcentrator

Split/splitless injector (included standard) accepts: - Direct liquid sampling (organic solution) via syringe

- Liquid extraction via SPME fiber or PSI-Probe

w/ Gerstel Twister™ Solid PSI-Probe™ thermal separation via TAG™ *

Sample Prep Kit (SPK)

- Simplified analysis of solids and liquids

Detects and identifies trace-level explosives, narcotics like Fentanyl and its analogues, A-series and Novichok CWAs, TICs,

environmental pollutants, and other chemicals

Standard Reference Database NIST/EPA/NIH Mass Spectral Library, SWGDRUG Mass

APAC

Spectral Library, and GriffinLib Mass Spectral Library included, with instant updates available

*optional accessories

AMERICAS

Threats

EMEA

7055 Troy Hill Dr. Suite 300 Elkridge, MD 21075 USA

10 Kallang Avenue #09-10 Aperia Tower 2 Singapore 335910

Luxemburgstraat 2 2321 Meer Belgium

Sampling & Analysis

Full identification in 4-15 minutes for most chemicals; identification within seconds (near real-time) when operating in Survey Mode

Mass Spectrometer

Mass Analyzer Type

Mass Range / Resolution

Ionization Type / Source

Detector

Vacuum System

Dynamic Range

Detection Limit

Self-contained miniature turbomolecular & diaphragm pumps

Electron Impact Ionization; non-radioactive ionization source

Electron Multiplier

Linear quadrupole mass filter

15-515 m/z; 0.7 amu @ FWHM

PPM (parts per million) - PPB (parts per billion). Note: PPT (parts

per trillion) for vapor analysis with extended sampling time.

Gas Chromatograph

LTM-GC Column

Temperature Range

DB-5MS (15 m x .18 mm x .18 um); others available

Programmable 40 to 300 °C; ramping of 100 °C/min

Specifications are subject to change without notice. For the most up-to-date specs, go to www.teledyneflir.com







Method Selector Tool



GSS Touch Chemical Identification Result



Trace-level detection of narcotics like Fentanyl and its analogues

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited. For assistance with confirming the Jurisdiction & Classification of Teledyne FLIR, LLC products, please contact exportquestions@flir.com. ©2021 Teledyne FLIR LLC. All rights reserved

Revised on 11/10/21 Griffin G510_Datasheet-LTR 21-1110

EDD DA



The Pendar X10 is a handheld, standoff Raman spectrometer to safely, quickly and accurately detect explosives, illicit drugs, chemical warfare agents, and hazardous materials.

Contact Us

+1 (617) 588-2128 x10@pendar.com www.pendar.com **Our Address**

30 Spinelli Place Cambridge, MA 02138



Introduction

The Pendar X10 enables rapid identification of toxic substances that traditional Raman-based systems have struggled to detect, including highly fluorescent, dark, and sensitive materials.

The Pendar X10 delivers handheld, standoff chemical identification at distances of up to six feet (2m), offering enhanced safety, accuracy, and speed via breakthrough Difference Raman technology. The Pendar X10 saves time, improves measurement reliability, and prevents exposure to dangerous substances while reducing the risk of igniting explosive chemicals.





Results Within Seconds



Minimal Sample Ignition Risk



No Eye Protection Required



Identify Dark and Highly Fluorescent Materials



Safe Distancing

The Pendar X10 prevents exposure to dangerous substances while reducing the risk of igniting explosive chemicals.

What sets the Pendar X10 apart from other products on the market?

The Pendar X10's design is founded on scientific innovation, and its performance parameters have been proven to hold in real-world scenarios. The Pendar X10 has been extensively tested by the U.S. government (including the U.S. Army and Navy, and the Department of Homeland Security) and is currently in use by multiple U.S. federal, state, and local agencies. When dealing with dangerous materials and substances, the Pendar X10 demonstrates high-performance capabilities in all the ways that matter most: safety, speed, and accuracy.

Who can benefit from using the Pendar X10?

From law enforcement to military specialists, bomb squads, first responders, and disaster management personnel, the Pendar X10 is applicable in many public service, government, and military sectors to fight crime, protect troops and civilians, and enhance homeland security. In the private sector, the Pendar X10 can provide a compelling solution for chemical identification needs in pharmaceutical manufacturing, agriculture, and environmental protection.









How do you use the Pendar X10 in the field?

The Pendar X10 is lightweight, rugged, and portable, with a battery that will last for 2 hours of continuous measurements. The handheld tool supports single-hand operation and comes apart in three components for easy storage and transport. The standoff distance is adjustable from 1 to 6 feet, adapting to the environment and situational needs. A 1/4-20 mounting hole allows for convenient, quick mounting on the included tripod and most other off-the-shelf tripods for a secure stationary setup. The standoff design prevents operators from disturbing potential crime scenes by leaving evidence intact. The Pendar X10 works in temperatures ranging between -20C and 40C (-4F to 104F). Because of its Class 3R eye safety rating, operators don't need to complete laser eye safety training, allowing for a broader range of users and better allocation of staff resources.

Capabilities: Safety

The Pendar X10 delivers true standoff detection with a novel point-and-shoot handheld design measuring at distances up to 6 feet. This feature allows users to avoid touching or accidentally inhaling potentially dangerous substances by aiming the Pendar X10 at materials from a safe distance, even inside clear plastic bags, under fume hoods, and behind transparent windows, doors, and car windshields. The Pendar X10's reach allows you to measure through openings inside of large containers, such as chemical drums, with no sampling required.

Chemicals that ignite or explode due to excessive heat generation from Raman systems have been a long-standing concern for operators, often preventing them from attempting to measure dark materials. The Pendar X10 offers added safety features when dealing with dark and sensitive materials. The Pendar X10 does not focus the Raman laser beam on one small spot, risking dangerous temperature levels. Instead, a novel optical system rapidly moves the laser spot across a larger area for measurement, preventing any particular sample area from reaching the ignition point. The laser system includes an automatic shut-off if an anomaly is detected in the laser motion, providing another critical level of safety.



Point and Shoot

The Pendar X10 delivers true standoff detection with a novel point-and-shoot handheld design measuring at distances up to 6 feet.

Capabilities: Speed

The Pendar X10 boots up from a cold start in 60 seconds or fewer, supporting quick setup and takedown in fast-moving and rapidly changing environments. Right after startup, a measurement can be started with a simple push of the trigger. While many fluorescent materials take minutes to identify with other Raman systems, the Pendar X10 frequently takes fewer than 30 seconds and identifies most other chemicals in fewer than 10 seconds. The standoff capability prevents time-consuming sample collection and handling.

Point and shoot to identify multiple samples in rapid succession and quickly adjust the measurement distance using the motorized optics. Take the guesswork out of focusing the system on successive targets by following the aiming lasers' feedback. The Pendar X10's precision and reliability save time by avoiding delays due to identification errors necessitating repeat measurements. Pendar's proprietary computer algorithm for data processing and our continuously growing digital library of substances allow for quick, accurate matching. The Pendar X10's powerful embedded processor delivers rapid analysis.



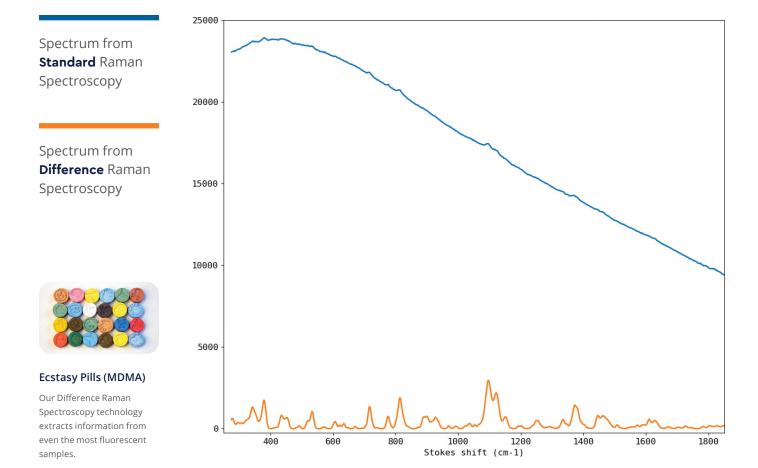
Handheld Design

Right after boot-up, start a measurement with a simple push of the trigger. Identify most chemicals in fewer than 10 seconds.

Capabilities: Accuracy

Chemicals emitting a fluorescent background when illuminated by a laser have been notoriously difficult to measure accurately with Raman spectroscopy. The Pendar X10 elegantly solves this challenge with Difference Raman spectroscopy using two lasers at two slightly different wavelengths. Both lasers return spectra with the same fluorescent background but shifted Raman signatures.

The Pendar X10 can remove the fluorescence by calculating the difference between the two laser measurements. In other words, Difference Raman technology reliably extracts the spectral signature's richest component for identification while protecting against calibration drift. The same technique also allows subtracting ambient light, an essential pre-requisite for successful standoff measurements.



What can the Pendar X10 detect?

The Pendar X10 can identify a wide range of explosives, illicit drugs, and chemical warfare agents, as long as the sample is presented in a visible quantity of a liquid, gel, or solid substance. Pendar's digital library of identifiable materials is continually expanding, so don't hesitate to reach out to us regarding specific detection requirements.







rugs Toxic Materials



Explosive Materials

The Pendar X10 safely identifies dark or absorptive substances, as well as sensitive primary explosives.

Explosives

The Pendar X10 safely identifies dark or absorptive substances, sensitive primery explosives and heat-sensitive materials, like gunpowder, iron oxide, HMTD or fuminates. Also included are military explosives like RDX, HMX, TNT, and C-4, homemade explosives (HMEs) based on peroxides and nitrates, and explosives precursors such as oxidizers and acid mixtures. Our team works closely with HME experts to continually expand our library to cover everything you may find in a clandestine lab or an improvised explosive device.

What can the Pendar X10 detect?



Drug Detection

The Pendar X10 can detect DEA controlled substances, and more than 200 fentanyl analogs.

Illicit Drugs

The Pendar X10's ability to detect controlled substances, prescription drugs, and drug precursors includes DEA scheduled items, List I and II items, and more than 200 fentanyl analogs. Further, the Pendar X10 detects many common heroin and cocaine cutting agents and synthetic drugs such as MDMA/Ecstasy. The Pendar X10's enhanced safety features preventing the ignition of substances are especially helpful in averting the release of toxic fumes and aerosols.

Pendar currently has one of the most comprehensive libraries of new psychoactive substances (NPS) such as synthetic opioids, cannabinoids, and cathinones.

The Pendar X10 is uniquely equipped to handle non-homogeneous mixtures because it leverages a large sampling area to spatially average the measurement.

Our Difference Raman provides first-in-class ability to deal with laser-induced fluorescence, a common issue with many illicit drugs.

"The rapid emergence of a large number of NPS on the global drug market poses a significant risk to public health and a challenge to drug policy. [...] The analysis and identification of a large number of chemically diverse substances present in drug markets at the same time is demanding. Monitoring, information sharing, early warning and risk awareness are essential to respond to this situation."

- United Nations Office on Drugs and Crime (UNODC)

What can the Pendar X10 detect?



Toxic Materials

As long as they are liquid or solid, the Pendar X10 rapidly identifies the prominent chemical warfare agents (G-series, mustards, VX), including fourth-generation agents (Novichoks, A-series) as well as pharmaceutical-based and riot control agents. Our underlying technology is particularly well suited to achieve the identification of degraded agents. A wide range of hazardous materials, toxic industrial chemicals, and pesticides are also included.



Hazardous Materials

The Pendar X10 rapidly identifies the prominent chemical warfare agents including fourth-generation agents.

Who are the people behind the Pendar X10's design?

Our team at Pendar is made up of industry experts, and many of us have previously worked on the Raman systems you may currently use. Decades of experience allow our scientists and senior management to continually improve Raman systems while identifying technological gaps and pain points for users.

Our team is intimately familiar with older Raman systems' shortcomings. This is exactly why our scientists and engineers were driven to dig into those challenges, evolve the technology, and innovate a better, faster, safer, easier-to-use system poised to make a lasting impact in the industry for handheld Raman chemical identification solutions. Our team envisioned, designed, and built the Pendar X10 based on proprietary laser and optical systems, software, and spectroscopic technology, allowing us to control and fine-tune all performance aspects for a truly integrated system.



Industry Experts

Our people bring diverse experience in technology and business, and a drive to bring scientific innovation to challenging fields.

Want to know more?

Pendar is committed to leveraging emerging technology and decades of expertise to build intelligent autonomous chemistry systems that safely, quickly, and reliably provide actionable intelligence. Please reach out with any feedback or inquiries about our products.

Contact Us

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Our Address

30 Spinelli Place Cambridge, MA 02138



DETECT AND IDENTIFY THOUSANDS OF GASES IN SECONDS





Less than 20 seconds for results

SENSITIVE:

Detection and Identification at concentrations down to low ppm

SPECIFIC:

Positive identification of gases and vapors using proven FTIR technology



Detect and identify more than 5,500 gases and vapors including:

- TICS

- VOCs

- Petroleum Products

- CWA Agents

- Solvents

- Refrigerants

- Industrial Chemicals

- Common Gases



IDENTIFICATION PROVIDES THE VITAL INFORMATION TO SAFELY CHARACTERIZE AND MANAGE DANGEROUS EVENTS





REDWAVE INTRODUCES THE "TEAMLEADER" APP

- 1. Access to current XplorIR results from anywhere
- 2. Real-time XplorIR GPS location
- 3. Access to proprietary threat database
- 4. 24/7 access to Reachback







PLORIR DETECTION AND IDENTIFICATION OF CRITICALLY IMPORTANT COMPOUNDS

FUNCTIONAL SPECIFICATIONS:

0x240
WMD

IDENTIFY OVER 5,500 COMPOUNDS INCLUDING:

ITF-40 LIST

Acrolein

Acrylonitrile

Allyl Alcohol

Ammonia

Arsine

Boron Trifluoride

Carbon Monoxide

Cyanogen Chloride (CK)

Diborane

Dimethylamine

Ethylene Oxide

Formaldehyde

Hydrazine

Hydrogen Chloride

Hydrogen Cyanide

Hydrogen Fluoride

Hydrogen Sulfide

Methyl Hydrazine

Nitric Acid

Nitrogen Dioxide

Phosgene

Phosphorus Trichloride

Phosphoryl Trichloride

Propylene Oxide

Sulfur Dioxide

OTHER COMMON **MATERIALS**

Acetylene

Benzene

Butadiene

Butane

Carbon Dioxide

Carbon Tetrachloride

Chloroform

Diethyl Ether

Ethyl Alcohol

Flammable Liquids

Fluothane

Gasoline

Hydrochloric Acid

Methane

Methanol

Methylene Chloride

n-Butyl Nitrite

Nitrous Oxide

Phosphine

Propane

Refrigerant Gases

Solvents

Sulfur Hexafluoride

Trichloroethylene

Xylenes

