



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

Header @ 3

List View

- General Information
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- Document Information
- Clarification Request

Procurement Folder: 1324304
 Procurement Type: Central Purchase Order
 Vendor ID: 000000225236
 Legal Name: FLIR COMMERCIAL SYSTEMS INC
 Alias/DBA:
 Total Bid: \$108,250.00
 Response Date: 01/24/2024
 Response Time: 16:50
 Responded By User ID: NasPartners
 First Name: Maegan
 Last Name: Howe
 Email: NasPartnersReturns@teledy
 Phone: 6033247717

SO Doc Code: CRFQ
 SO Dept: 0313
 SO Doc ID: DEP2400000026
 Published Date: 1/24/24
 Close Date: 1/30/24
 Close Time: 13:30
 Status: Closed
 Solicitation Description: Hydrocarbon Gas Imaging Infrared Camera
 Total of Header Attachments: 3
 Total of All Attachments: 3

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Hydrocarbon Gas Imaging Infrared System Camera	1.00000	EA	108250.000000	108250.00

Comm Code	Manufacturer	Specification	Model #
45121522			

Commodity Line Comments: Price includes:
1040-0102 - FLIR Gx320-24° Gas Imaging Camera
T300450ACC - Additional Gx Battery
4YW-LPL-WG1 - 4 Year Limited Parts and Labor Extended Warranty

Extended Description:
Hydrocarbon Gas Imaging Infrared System Camera

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	On site 8 hour training class				0.00

Comm Code	Manufacturer	Specification	Model #
86101810			

Commodity Line Comments:

Extended Description:
On site 8 hour training class that includes evaluation of trained person's ability to find and record gas leaks at a site to be determined by DAQ.



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

State of West Virginia
 Centralized Request for Quote
 Miscellaneous

Proc Folder: 1324304

Doc Description: Hydrocarbon Gas Imaging Infrared Camera

Reason for Modification:

Addendum #1 issued to publish agency responses to all vendor submitted questions.

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2024-01-24	2024-01-30 13:30	CRFQ 0313 DEP2400000026	2

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State :

Country :

Zip :

Principal Contact :

Vendor Contact Phone:

Extension:

FOR INFORMATION CONTACT THE BUYER

Joseph E Hager III
 (304) 558-2306
 joseph.e.hageriii@wv.gov

**Vendor
 Signature X**

FEIN#

DATE

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

ADDITIONAL INFORMATION

The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Department of Environmental Protection's Division of Air Quality to establish a contract for the one-time purchase of a Hydrocarbon Gas Imaging Infrared Camera per the attached specifications and terms and conditions.

INVOICE TO		SHIP TO	
ENVIRONMENTAL PROTECTION DIVISION OF AIR QUALITY 601 57TH ST SE CHARLESTON US	WV	ENVIRONMENTAL PROTECTION DIVISION OF AIR QUALITY 601 57TH ST SE CHARLESTON US	WV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Hydrocarbon Gas Imaging Infrared System Camera	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
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Extended Description:
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2	On site 8 hour training class				

Comm Code	Manufacturer	Specification	Model #
86101810			

Extended Description:
On site 8 hour training class that includes evaluation of trained person's ability to find and record gas leaks at a site to be determined by DAQ.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
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SOLICITATION NUMBER:
Addendum Number:

The purpose of this addendum is to modify the solicitation identified as (“Solicitation”) to reflect the change(s) identified and described below.

Applicable Addendum Category:

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

Description of Modification to Solicitation:

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

RFI: Questions from vendors for CRFQ DEP 24*26 Hydrocarbon Gas Imaging Infrared Camera

Q.1. I received your invitation to bid # DEP240000026 for the infrared imaging camera. I would be happy to look into this further to see if this will be something we are able to source for you, but with the product description and the code 45121522 I am not exactly sure where to reach out about sourcing.

Is there a preferred manufacturer for this bid?

A. We do not have a preferred manufacturer for this bid.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

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

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

Teledyne FLIR
Company

Adrian Whipple
Authorized Signature

1/24/24
Date



FLIR G-SERIES™

Gx320, G620, Gx620 Optical Gas Imaging (OGI)
Cameras for Hydrocarbons



www.flir.com/GSeries

The FLIR Gx320, G620, and Gx620 OGI cameras are used to detect hydrocarbons, methane (CH₄), and other Volatile Organic Compound (VOC) emissions from multiple stages of the oil and gas supply chain, as well as other industrial markets. Designed with your safety and efficiency in mind, these cooled, high-resolution cameras can detect environmentally harmful gases from safe distances. Reduce inspection time by scanning large areas without interfering or shutting down large-scale operations. Featuring innovative gas quantification analytics inside the camera and a rotating, color LCD touch screen, these FLIR hydrocarbon OGI cameras are ideal for detecting gas emissions in complex systems including refineries, petrochemical facilities, natural gas well pads, compression stations, and power generation plants. Combined with FLIR Ignite™ software, the FLIR Gx320, G620, and Gx620 cameras allow you to easily upload images and videos to the cloud where you can edit, organize, store, and share data.

SUPERIOR GAS VISUALIZATION AND QUANTIFICATION

Detect gas leaks accurately in real-time

- Quantify gas leaks in-camera, eliminating the need for a secondary device
- Auto-adjust the level and span of your image with 1-Touch Level/Span
- Certified and classified for use in hazardous environments
- Meets many regulatory compliance standards, including U.S. EPA 0000a

IMPROVED SOFTWARE INTEGRATION

Record and report findings efficiently with the FLIR ecosystem

- Effortlessly edit and store images in the cloud, and wirelessly transfer files using the included FLIR Ignite cloud service
- Easily incorporate with third-party software solutions
- Built in Wi-Fi and Bluetooth® allow you to connect to smartphones or tablets
- Conveniently navigate large areas with FLIR Inspection Route and GPS log on board

BETTER ERGONOMICS FOR OPERATION

Comfortably interact with the camera

- Expand inspection capabilities with quick and easy exchangeable lens options
- View targets from any direction with rotating 10.16 cm (4 in) LCD touchscreen
- Efficiently operate with improved touchscreen Graphical User Interface (GUI)
- Advanced features to streamline the inspection process, including Multi-REC (recording mode)

For more information contact: Sales@TeledyneFLIR.com
or to find your local support number, visit: flir.com/contactsupport

www.teledyneflir.com

SPECIFICATIONS

	Gx320	Gx620	G620
IR Resolution	320 × 240 pixels	640 × 480 pixels	
Focus	Manual Focus		Autofocus, Manual focus
Detector Pitch	30 μm	15 μm	
Thermal Sensitivity/NETD	<10 mK at 30°C (86°F)	20 mK at 30°C (86°F)	
Gas Sensitivity	CH ₄ : <9.6 ppm x m Hydrocarbons (multiple): <4 ppm x m (ΔT = 10°C, Distance = 1 m)	CH ₄ : <29 ppm x m Hydrocarbons (multiple): <4 ppm x m (ΔT = 10°C, Distance = 1 m)	
Hazardous Location Compliance	ATEX/IECEx, Ex ic nC op is IIC T4 Gc II 3 G ANSI/ISA-12.12.01-2013, Class I Division 2 CSA 22.2 No. 213, Class I Division 2		None
Detector and Optical Data			
Detector Type	Focal plane array (FPA), cooled InSb		
Spectral Range	3.2 μm to 3.4 μm		
Sensor Cooling	Stirling Microcooler (FLIR MC-3)		
Digital Image Enhancement	High sensitivity mode (HSM), noise reduction filter		
Available Lenses	24° × 18° (23 mm); 14.5° × 10.8° (38 mm)		
F-Number	1.59		
Image Presentation			
Display	4", 640 × 480 pixel rotatable, touchscreen LCD		
Viewfinder	Built-in, tiltable OLED, 800 × 480 pixels		
Image Presentation Modes	IR image, visual image, high sensitivity mode (HSM)		
Color Palettes	Arctic, White hot, Black hot, Iron, Lava, Rainbow, Rainbow HC		
Zoom	1–8× continuous, digital zoom		
Laser Pointer	Class 2		
Measurement & Analysis			
Measurement Temperature Range	-20°C to 350°C (-4°F to 662°F)		
Accuracy	±1°C (±1.8°F) for temperature range (0°C, to 100°C, 32°F to 212°F) or ±2% of reading for temperature range (>100°C, >212°F)		
Image Analysis	10 spots, 5 boxes with max/min/average, 1 line (horizontal or vertical), measurement corrections		
Annotations			
Voice	60 seconds with Bluetooth on still images and video		
Text	Text from predefined list or soft keyboard on touchscreen		

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

For more information contact: Sales@TeledyneFLIR.com
or to find your local support number, visit: flir.com/contactsupport

Communication & Data Storage	
FLIR Inspection Route	Enabled in the camera
MultiREC Recording	Record multiple files automatically in customizable order
GPS	Location data automatically added to every still image; first frame in video from built-in GPS; data logging feature
Compass	Yes
Cloud Services (via Wi-Fi)	FLIR Ignite for direct, secure image uploading, organizing, storage, and sharing (required firmware available)
Storage Media	Removable SD card
Image File Formats	Standard JPEG, measurement data included. Infrared-only mode.
Communication Interfaces	USB 2.0, Bluetooth via headset, Wi-Fi, HDMI
Video Out	HDMI; DVI
Video Recording and Streaming	
Radiometric IR Video Recording	RTRR (.csq)
Non-Radiometric IR or Visual Video	H.264 to memory card
Radiometric IR Video Streaming	Over UVC
Non-Radiometric IR Video Streaming	H.264 (AVC) or MPEG4 over RTSP (Wi-Fi); MJPEG over UVC and RTSP (Wi-Fi)
Environmental & Certifications	
Operating Temperature Range	-20°C to 50°C (-4°F to 122°F)
Storage Temperature Range	-30°C to 60°C (-22°F to 140°F)
Encapsulation	IP54 (IEC 60529)
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Additional Information	
Battery Type	Rechargeable Li-ion battery; 7.4 V, charged in camera or separate 2-bay charger
Battery Operating Time	>2.5 hours at 25°C (68°F) and typical use
Battery Charging Time	2.5 hours to 95% capacity, charging status indicated by LEDs
Camera Size	251.6 mm × 164.5 mm × 170.9 mm (9.9 in × 6.48 in × 6.73 in)
Camera Weight	3 kg (6.18 lb)
Mounting Interfaces	UNC ¼"-20
Box Contents	
Packaging	Infrared camera with lens, battery: 2 pcs., battery charger, power supply including multi-plugs, hand strap, neck strap, lens cap, lens cap strap, memory card, HDMI-HDMI cable, USB cable, screwdriver TX20, printed documentation, and hard transport case

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.

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Revised 03/01/23
GSeries_Datasheet-LTR 21-0000





Quote #: SOLQ-36690
Customer ID:

Date: 1/16/2024
Valid: 60 days

Thank you for considering Teledyne FLIR for your product needs. Please let Adrian Whipple know if you have any questions or need a revision.

Prepared For:	Prepared By:
Jamie Jarrett james.f.jarrett@wv.gov (304) 926-0499 ext1207	Adrian Whipple Adrian.Whipple@Teledyne.com 7245842029

Customer – Quote to:
West Virginia Department of Environmental Protection West Virginia Department of Environmental Protection Charleston WV 25304 United States of America

PART NUMBER/DESCRIPTION	PRICE	QTY	TOTAL
10401-0102 FLIR Gx320 24°	\$106,500.00	1	\$106,500.00
T300450ACC P20 Gx Battery 2S2P	\$250.00	1	\$250.00
4YW-LPL-WG1 4 Year Limited Parts and Labor Extended Warranty for GF-Series Cameras	\$1,500.00	1	\$1,500.00
Training/Evaluation Training/Evaluation of DAQ personnel to find & Record Leaks	\$0.00	1	\$0.00

Purchase Order must reference quote number SOLQ-36690 for pricing to be honored	Shipping:	\$50.00
	Total:	\$108,300.00

PURCHASE ORDER INSTRUCTIONS

Purchase Order: Please send your purchase order, referencing this quote number, along with a tax-exempt certificate, if applicable, directly to:

Please note the address change, please change the address on PO's to match;

Teledyne FLIR Commercial Systems, Inc., 110 Lowell Rd., Hudson, NH 03051

Email: insdirect@flir.com

Teledyne FLIR Commercial Systems, Inc. is registered to collect sales tax when shipping product to the following states: AL, AR, AZ, CA, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NE, NC, ND, NJ, NY, NM, NV, OH, OK, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV and WY.

Delivery: FOB Origin Teledyne FLIR's Plant within 60 days (or better) upon receipt of order with freight charges prepaid & added.

Payment: Net 30 days upon approved credit/Payment in Advance/Visa, MasterCard, AMEX.

TERMS AND CONDITIONS

Terms & Conditions: Seller's Offer, and any order issued by Buyer to Seller for the goods and/or services specified herein, is strictly limited to Seller's General Terms and Conditions of Sale, which can be found at <https://www.flir.com/corporate/reseller-and-customer-information/>

Export: These commodities, technology or software are subject to the United States Export Administration Regulations. Diversion contrary to U.S. law is prohibited. They may not be used in the design, development, production or use of nuclear, chemical, or biological weapons or missiles.

These commodities may not be sold, transferred, or exported to the territory of Belarus, Burundi, Central African Republic, Crimea Region (of Ukraine), Cuba, the Democratic Republic of Congo, Donetsk Region (of Ukraine), the Republic of Congo, Guinea-Bissau, Iran, Luhansk Region (of Ukraine), North Korea, Russia, Rwanda, the Republic of South Sudan, the Republic of Sudan, Somalia, or Syria, Tanzania, Uganda, Zambia, and Zimbabwe.

The products, data and/or services described herein are subject to the Export Administration Regulations (EAR) (15 C.F.R. Sections 730-774).