

# FLIR G-SERIES™

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



The FLIR Gx320, G620, and Gx620 OGI cameras are used to detect hydrocarbons, methane (CH<sub>4</sub>), 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.



[www.flir.com/GSeries](http://www.flir.com/GSeries)

## 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)

## 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 <sub>4</sub> : <9.6 ppm x m<br>Hydrocarbons (multiple): <4 ppm x m<br>(ΔT = 10°C, Distance = 1 m)                              | CH <sub>4</sub> : <29 ppm x m<br>Hydrocarbons (multiple): <4 ppm x m<br>(ΔT = 10°C, Distance = 1 m) |                         |
| Hazardous Location Compliance     | ATEX/IECEX, Ex ic nC op is IIC T4 Gc II 3 G<br>ANSI/ISA-12.12.01-2013, Class I Division 2<br>CSA 22.2 No. 213, Class I Division 2 |   | None                    |
| <b>Detector and Optical Data</b>  |   |   |                         |
| 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  |   |                         |
| <b>Image Presentation</b>         |   |   |                         |
| 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   |   |                         |
| <b>Measurement &amp; Analysis</b> |   |   |                         |
| 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                                  |   |                         |
| <b>Annotations</b>                |   |   |                         |
| 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](http://www.teledyneflir.com)

| <b>Communication &amp; Data Storage</b>   |  |
|---|--|
| 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  |
| <b>Video Recording and Streaming</b>      |  |
| 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)  |
| <b>Environmental &amp; Certifications</b> |  |
| 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)  |
| <b>Additional Information</b>             |  |
| 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  |
| <b>Box Contents</b>                       |  |
| 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 |

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| Chennai     | Raipur    |
| Hyderabad   | Singrauli |
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| Mumbai      |           |

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