

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 (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)

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

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
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