



# Remote Visual Inspection (RVI) Thermal Imaging Cameras

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TELEDYNE FLIR

## FLIR Gx320 Intrinsically Safe Camera

Pine Item #52875

**Optical gas imaging camera for hydrocarbons**

### DESCRIPTION:

The FLIR Gx320 is an innovative Optical Gas Imaging (OGI) camera designed 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. This optical gas imaging camera lets inspectors check thousands of components and see potential gas leaks in real-time. With up to 640 × 480 (307,200 pixels) thermal resolution, FLIR G-Series cameras have innovative gas quantification analytics that measures leak type and severity inside the camera, eliminating the need for a secondary device.

### FEATURES:

- **SUPERIOR GAS VISUALIZATION AND QUANTIFICATION**  
- Revolutionary gas leak-detection features including quantification analytics inside the camera which measures the type and size of leaks, eliminating the need for a secondary device
- **RECORD AND REPORT FINDINGS EFFICIENTLY** - Built-in Wi-Fi and Bluetooth® allow you to connect to smartphones or tablets and effortlessly edit and store images in the cloud, or wirelessly transfer files using the included FLIR Ignite™ cloud service
- **ERGONOMIC FOR COMFORTABLE OPERATION** - Comfortably operate and interact with your G-Series camera thanks to its rotating 10.16 cm (4 in) LCD touchscreen, which allows you view targets from any direction

### APPLICATIONS:

- Ideal for detecting gas emissions in complex systems
- Inspections in refineries and petrochemical facilities
- Inspections of natural well pads and compression stations
- Inspections at power generation plants

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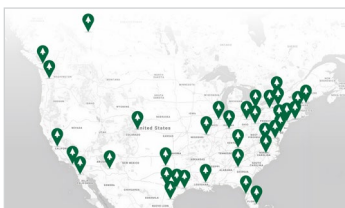
Pine Environmental

## Product Specifications

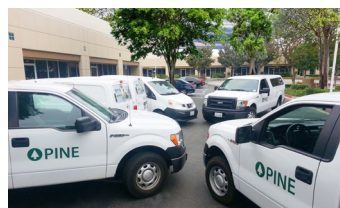
Types of Gas Detection	Butane, Ethanol, Ethylene, Hydrocarbons, Methane, Propane
IR Resolution	320 × 240 thermal resolution (76,800 pixels)
Detector Pitch	30 μm
Accuracy	±1°C (±1.8°F) for temperature range 0°C to 100°C (32°F to 212°F) or ±2% of reading for temperature range >100°C (>212°F)
Spectral Range	3.2 μm to 3.4 μm
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
<b>Measurement &amp; Analysis</b>	
Area Box	5 (min./max./avg.)
Delta T	Yes
Gas Quantification	Quantification onboard camera
Gas Sensitivity	CH <sub>4</sub> : <9.6 ppm x m, Hydrocarbons (multiple): <4 ppm x m, (ΔT = 10°C, Distance = 1 m)
Measurement Corrections	Reflected temperature, distance, atmospheric transmission, humidity, external optics
Profile	1 live line (horiz. or vert.)
Recording	MultiREC Recording; Record multiple files automatically in customizable order
Spot Meter	10
Thermal Sensitivity	<10 mK at 30°C (86°F)
<b>Communication &amp; Data Storage</b>	
Communication Interfaces	USB 2.0, Bluetooth via headset, Wi-Fi, HDMI
Image File Format	Standard JPEG, measurement data included. Infrared-only mode
Radio	<p><b>Operating frequency:</b></p> <ul style="list-style-type: none"> <li>• Bluetooth + EDR: 2402–2480 MHz</li> <li>• WLAN 2.4 GHz: 2412–2462 MHz</li> <li>• WLAN 5 GHz: 5150-5250 MHz Note that frequency band 5150-5250 MHz is for indoor use only, see national regulations.</li> </ul> <p><b>RF output (EIRP)</b></p> <ul style="list-style-type: none"> <li>• Bluetooth + EDR: &lt;10 dBm</li> <li>• WLAN: &lt;17 dBm</li> </ul> <p><b>Antenna</b></p> <ul style="list-style-type: none"> <li>• Integrated PIFA antenna (gain: maximum 2.6 dBi)</li> </ul>
Storage Media	Removable SD card
Video Out	HDMI 640 × 480, HDMI 1280 × 720, DVI 640 × 480, DVI 800 × 600
<b>General</b>	
Annotations	Voice: 60 seconds with Bluetooth on still images and video
Text: Text from predefined list or soft keyboard on touchscreen	30 μm
Image Sketch: Yes, on infrared only	±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)
Cloud Services	Via Wi-Fi; FLIR Ignite for direct, secure image uploading, organizing, storage, and sharing (required firmware available)

## Product Specifications

Compass	Yes
FLIR Inspection Route	Enabled in the camera
GPS [removable]	Location data automatically added to every still image and first frame in video from built-in GPS
Laser Pointer	Class 2
Package Includes	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, knob screw (optional screw for the rear cover), printed documentation, hard transport case
Packaging Size	600 mm × 510 mm × 410 mm (23.6 in × 20.1 in × 16.1 in)
Size [L x W x H] w Lens	251.6 mm × 164.5 mm × 170.9 mm (9.9 in × 6.48 in × 6.73 in)
Weight [incl lens & batteries]	3 kg (6.18 lb)
<b>Power</b>	
Battery operating time	>2.5 hours at 25°C (68°F) and typical use
Battery Type	Rechargeable Li-ion battery; 7.4 V, charged in camera or separate 2-bay charger
Charging Time	2.5 hours to 95% capacity, charging status indicated by LEDs
Start Up Time	Typically 7 min. at 25°C (77°F)
<b>Environmental &amp; Certificates</b>	
Certifications	RoHS: 2011/65/EU, WEEE: 2012/19/EU, RED: 2014/53/EU, EMC: ETSI EN 301 489-1 (radio), ETSI EN 301 489-17, EN 55032 (emission), EN 55035 (immunity), EN 61000-4-8 Level 5 (magnetic field), EN 61000-6-2, Immunity Industrial Environment, FCC 47 CFR part 15 B, class B (emission), ICES-003
Encapsulation	IP54 (IEC 60529)
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
Mounting	UNC ¼"-20
Operating Temperature Range	-20°C to 50°C (-4°F to 122°F)
Shock & Vibration	Shock: 25 g (IEC 60068-2-27); Vibration: 2 g (IEC 60068-2-6)
Storage Temperature Range	-30°C to 60°C (-22°F to 140°F)



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