FLIR GF300/GF320

Infrared Camera for Methane and VOC Detection

The FLIR GF300/GF320 is a revolutionary infrared camera capable of detecting Methane and Volatile Organic Compound (VOC) fugitive emissions from the production, transportation, and use of oil and natural gas. This camera can scan large areas and visualize potential gas leaks in real-time, so you can check thousands of components over the course of one survey. Designed with the user in mind, the GF300/GF320 is lightweight, offers both a viewfinder and LCD monitor, and has direct access to controls. Embedded GPS data helps in identifying the precise location of faults and leaks, for faster repairs.

Visualize Gas Emissions in Real-time

The FLIR GF300/GF320 is unbeatable at detecting gas emissions, with a High Sensitivity Mode that lets you visualize even the smallest leaks in real-time. Use this visual verification to pinpoint the exact source of the emissions and begin repairs immediately. In addition, the GF320 is capable of measuring temperatures up to 350 °C with ±1 °C accuracy, allowing you to note temperature differentials and improve gas plume detection.

Increase Worker Safety

Surveys performed with GF300/GF320 cameras are nine-times faster than those performed with gas sniffers. They're also safer: optical gas imaging does not require close contact with components in order to detect gas. This reduces the risk of exposure to invisible and potentially harmful chemicals. In addition, the camera can scan areas of interest that are difficult to reach using conventional methods. The ergonomic design, with a bright LCD and articulated viewfinder, takes the strain out of a full day of surveys.

Stop Leaks, Save Money, Help the Environment

By fixing gas leaks, you can save your company thousands in lost gas and lost profits, while at the same time improving regulatory compliance and protecting the environment. The FLIR GF300/GF320 complies with all current regulations for Optical Gas Imaging (OGI). See our website for a full listing.

The GF300/GF320 detects the following gases:

Methanol	Methane	Benzene	Ethane	Propylene
Ethanol	Pentane	1-Pentene	Isoprene	Butane
Ethylbenzene	MEK	Toluene	Propane	Octane
Heptane	MIBK	Xylene	Ethylene	Hexane

Specifications

Model	GF300 / GF320
Detector Type	FLIR Indium Antimonide (InSb)
Spectral Range	3.2 – 3.4 µm
Resolution	320 x 240 pixels
Detector Pitch	30 µm
NETD/Thermal Sensitivity	<15 mK @ +30°C (+86°F)
Sensor Cooling	Stirling Microcooler (FLIR MC-3)
Electronics / Imaging	
Image Modes	IR Image, visual image, high sensitivity mode (HSM)
Frame Rate (Full Window)	60 Hz
Dynamic Range	14-bit
Video Recording / Streaming	Real-time non-radiometric recording: MPEG4/H.264 (up to 60 min./clip) to memory card Real-time non-radiometric streaming: RTP/MPEG4
Visual Video	MPEG4 (25 min./clip) to memory card
Visual Image	3.2 MP from integrated visible camera
GPS	Location data stored with every image
Camera Control	Remote camera control via USB
Measurement	
Standard 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)
Optics	
Camera f/number	f/1.5
Available Fixed Lenses	14.5° (38 mm), 24° (23 mm)
Focus	Automatic (one touch) or manual (electric or on the lens)
Image Presentation	
On-Camera Display	Built-in widescreen, 4.3 in. LCD, 800 x 480 pixels
Automatic Gain Control	Continuous/manual, linear, histogram
Image Analysis*	10 spotmeters, 5 boxes with max./min./average, profile, delta temperatures, emissivity & measurement corrections
Color palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Zoom	1-8x continuous, digital zoom
General	
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	IP 54 (IEC 60529)
Bump / Vibration	25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6)
Power	AC adapter 90-260 VAC, 50/60 Hz or 12 V from a vehicle
Battery System	Rechargeable Li-ion battery
Weight w/ Battery & Lens	1.94 kg (4.27 lbs)
Size (L x W x H) w/ Lens	305 x 169 x 161 mm
Mounting	Standard, 1/4"-20

* GF320 model only

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