

P/N: 44401-0202

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Website

http://www.flir.com

Customer support

http://support.flir.com

Disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions



General description

The FLIR GF300 is an infrared camera for optical gas imaging (OGI) that visualizes and pinpoints leaks of methane and other volatile organic compounds (VOCs), without the need to shut down the operation. The portable camera also greatly improves operator safety, by detecting emissions at a safe distance, and helps to protect the environment by tracing leaks of environmentally harmful gases.

The FLIR GF300 is used in industrial settings such as oil refineries, natural gas processing plants, offshore platforms, chemical/petrochemical industries, and biogas and power generation plants.

Benefits:

- Improved efficiency: The FLIR GF300 reduces revenue loss by pinpointing even small gas leaks
 quickly and efficiently, and from a distance. It also reduces the inspection time by allowing a broad
 area to be scanned rapidly and without the need to interrupt the industrial process.
- Increased worker safety: OGI allows gas leaks to be detected in a non-contact mode and from a
 safe distance. This reduces the risk of the user being exposed to invisible and potentially harmful or
 explosive chemicals. With a FLIR GF300 gas imaging camera it is easy to scan areas of interest
 that are difficult to reach with conventional methods. The camera is ergonomically designed, with a
 bright LCD and tiltable viewfinder, which facilitates its use over a full working day.
- Protecting the environment: Several VOCs are dangerous to human health or cause harm to the
 environment, and are usually governed by regulations. Even small leaks can be detected and
 documented using the FLIR GF300 camera.

Detects the following gases: benzene, ethanol, ethylbenzene, heptane, hexane, isoprene, methanol, MEK, MIBK, octane, pentane, 1-pentene, toluene, xylene, butane, ethane, methane, propane, ethylene, propylene.

Licensing and classification	
License information	Interchangeable lens version of the FLIR GF3XX series requires US Department of State License and will be subject to limitations on resale, except inside US. Allow a minimum of 90 days after application submittal for approval.

Imaging and optical data	
IR resolution	320 × 240 pixels
Thermal sensitivity/NETD	<15 mK @ +30°C (+86°F)
Field of view (FOV)	24° × 18°
Minimum focus distance	0.3 m (1.0 ft.)
Focal length	23 mm (0.89 in.)
Lens identification	Automatic



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Imaging and optical data	
F-number	1.5
Focus	Automatic (one touch) or manual (electric or on the lens)
Zoom	1-8× continuous, digital zoom
Digital image enhancement	Noise reduction filter, high sensitivity mode (HSM)
Detector data	
Detector type	Focal plane array (FPA), cooled InSb
Spectral range	3.2–3.4 μm
Detector pitch	30 μm
Sensor cooling	Stirling Microcooler (FLIR MC-3)
Detects following gases	Benzene, Ethanol, Ethylbenzene, Heptane, Hexane, Isoprene, Methanol, MEK, MIBK, Octane, Pentane, 1-Pentene, Toluene, Xylene, Butane, Ethane, Methane, Propane, Ethylene, Propylene
Electronics and data rate	
Full frame rate	60 Hz
Image presentation	
Display	Built-in widescreen, 4.3 in. LCD, 800 × 480 pixels
Viewfinder	Built-in, tiltable OLED, 800 × 480 pixels
Automatic image adjustment	Continuous/manual; linear or histogram based
Manual image adjustment	Level/span
Image presentation modes	
Image modes	IR image, visual image, high sensitivity mode (HSM)
Measurement	
Temperature range	-20°C to +350°C (-4°F to +662°F)
Set-up	
Menu commands	Level, span
	Auto adjust continuous/manual/semi-automatic
	Zoom
	Palette
	Start/stop recording
	Store image
	Playback/recall image
Color palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Set-up commands	1 programmable button, overlay recording mode, local adaptation of units, language, date and time formats
Storage of images	
Storage media	Removable SD or SDHC memory card , two card slots
Image storage capacity	> 1200 images (JPEG) with post process capability per GB on memory card



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Storage of images	
Storage of images	Lievis
Image storage mode	IR/visual images
	Visual image can automatically be associated with corresponding IR image
Periodic image storage	Every 10 seconds up to 24 hours
File formats	Standard JPEG, 14 bit measurement data included
Geographic Information System	
GPS	Location data automatically added to every image from built-in GPS
Video recording in camera	
Non-radiometric IR video recording	MPEG4 (up to 60 minutes/clip) to memory card.
	Visual image can automatically be associated with corresponding recording of non-radiometric IR video.
Visual video recording	MPEG4 (25 minutes/clip) to memory card
Video streaming	
Non-radiometric IR video streaming	RTP/MPEG4
Digital camera	
Built-in digital camera	3.2 Mpixels, auto focus, and two video lamps
Laser pointer	
Laser	Activated by dedicated button
Laser classification	Class 2
Laser type	Semiconductor AlGaInP diode laser, 1 mW, 635 nm (red)
USB	
USB	USB-A: Connect external USB device USB Mini-B: Data transfer to and from PC
USB, standard	USB Mini-B: 2.0 high speed
Composite video	
Video out	Digital video output (image)
Power system	
Battery type	Rechargeable Li ion battery
Battery voltage	7.2 V
Battery capacity	4.4 Ah
Battery operating time	> 3 hours at 25°C (+68°F) and typical use
Charging system	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger
Charging time	2.5 h to 95% capacity, charging status indicated by LED's
External power operation	AC adapter 90–260 VAC, 50/60 Hz or 12 V from a vehicle (cable with standard plug, optional)
DC operation	10.8 to 16 V DC, polarity protected (proprietary protected)
Power	8.5 W typically
Start-up time	Typically 7 min. @ 25°C (+77°F)



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Environmental data		
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)	
Humidity (operating and storage)	IEC 68-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) (2 cycles)	
Directives	 73/23EEC 2004/108/EC 2002/95/EC 2002/96/EC 	
EMC	 EN61000-6-4 (Emission) EN61000-6-2 (Immunity) FCC 47 CFR Part 15 class A (Emission) EN 61 000-4-8, L5 	
Encapsulation	IP 54 (IEC 60529)	
Shock	25 g (IEC 60068-2-27)	
Vibration	2 g (IEC 60068-2-6)	
Safety	Power supply: EN/UL/IEC 60950-1	
Physical data		
Camera weight, excl. lens and battery	1.94 kg (4.27 lb.)	
Camera weight, incl. lens and excl. battery	2.24 kg (4.94 lb.)	
Camera weight, incl. lens and battery	2.48 kg (5.47 lb.)	
Battery weight	0.24 kg (0.52 lb.)	
Camera size, excl. lens $(L \times W \times H)$	284 × 169 × 161 mm (11.2 × 6.7 × 6.3 in.)	
Cameras size, incl. lens $(L \times W \times H)$	306 × 169 × 161 mm (12.0 × 6.7 × 6.3 in.)	
Battery size (L × W × H)	141 × 47 × 28 mm (5.5 × 1.8 × 1.1 in.)	
Battery charger size (L × W × H)	158 × 122 × 25 mm (6.2 × 4.8 × 1.0 in.)	
Tripod mounting	UNC 1/4"-20	
Housing material	Aluminum, magnesium	
Grip material	TPE thermoplastic elastomers	
Shipping information	-	
Packaging, type	Cardboard box	
List of contents	Infrared camera with lens Battery charger	

Shipping information	
Packaging, type	Cardboard box
List of contents	Infrared camera with lens Battery charger Battery, 2 ea. FLIR VideoReport PC software CD-ROM Hard transport case HDMI-DVI cable HDMI-HDMI cable Lens cap (2 ea.) Lens cap (mounted on lens) Memory card Power supply, incl. multi-plugs Printed documentation Shoulder strap USB cable
Packaging, weight	
Packaging, size	400 × 190 × 510 mm (15.7 × 7.5 × 20.1 in.)
EAN-13	7332558002728
UPC-12	845188001988
Country of origin	Sweden

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FLIR GF300 24°

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Supplies & accessories:

- T197387; IR lens, 24° with case for GF300, GF309, GF320
- T197388; IR lens, 6° with case for GF300, GF309, GF320, GF346.
- T197385; IR lens, 14.5° with case for GF300, GF309, GF320
- T197692; Battery charger, incl. power supply with multi plugs
- T910814; Power supply, incl. multi plugs
- T198511; Li-Ion Battery pack 7.4V 33Wh
- T911230ACC; Memory card SDHC 4 GB
- 1910423; USB cable Std A <-> Mini-B
- T198509; Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.
- T910815ACC; HDMI to HDMI cable 1.5 m
- T910816ACC; HDMI to DVI cable 1.5 m
- T197555; Hard transport case for FLIR GF3xx-Series
- T198585; FLIR VideoReport
- DSW-10000; FLIR IR Camera Player
- T199233; FLIR Atlas SDK for .NET
- T199234; FLIR Atlas SDK for MATLAB
- T198567; ThermoVision™ System Developers Kit Ver. 2.6
- T198566; ThermoVision™ LabVIEW® Digital Toolkit Ver. 3.3





