

### P/N: 65502-0102

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#### **Document identity**

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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 G300 pt is a pan/tilt infrared camera for optical gas imaging (OGI) that visualizes and pinpoints leaks of volatile organic compounds (VOCs) without the need to shut down the operation. The FLIR G300 pt is used in industrial settings such as oil refineries, natural gas processing plants, offshore platforms, chemical/petrochemical industries, and biogas and power generation plants.

The FLIR G300 pt precision pan/tilt mechanism gives operators accurate directional control while providing fully programmable scan patterns, radar slew-to-cue, and slew-to-alarm functionality.

#### **Key features**

- H.264, MPEG-4, and MJPEG streaming.
- Built-in web server.
- 100 Mbps Ethernet (100 m cable, wireless, fiber, etc.).
- Composite video output.
- Precise pan/tilt mechanism.
- Daylight camera.
- IP66 encapsulation.
- IP control: The FLIR G300 pt can be integrated into any existing TCP/IP network and controlled with a PC.
- Serial control interface: Pelco D or Bosch commands can be used over RS-232, RS-422, or RS-485 to remotely control a FLIR G300 pt camera.
- Multi-camera software: FLIR Sensors Manager allows users to manage and control a FLIR G300 pt in a TCP/IP network.

#### Benefits

- Improved efficiency: The FLIR G300 pt 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 G300 pt gas imaging camera unit it is easy to scan areas of interest that are difficult to reach with conventional methods.
- 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 G300 pt.

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

# Imaging and optical data

IR resolution	320 × 240 pixels
Thermal sensitivity/NETD	<15 mK @ +30°C (+86°F)



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<b>-</b>					
Imaging and optical data					
Field of view (FOV)	24° × 18°				
Minimum focus distance	0.3 m (1.0 ft.)				
Focal length	23 mm (0.89 in.)				
F-number	1.5				
Focus	Automatic using FLIR SDK, or manual				
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				
Sensor cooling	Stirling Microcooler (FLIR MC-3)				
MTBF	2 years or 15,000 hours (whichever is greatest), for a camera running 24/7 @ +20°C (+68°F)				
Detects following gases	Benzene, ethanol, ethylbenzene, heptane, hexane, isoprene, methanol, methyl ethyl ketone, MIBK, octane, pentane, 1-pentene, toluene, m- xylene, ethane, butane, methane, propane, ethylene, propylene				
Imaging and optical data (visual camera)					
Field of view (FOV)	57.8° (H) to 1.7° (H)				
Focal length	3.4 mm (wide) to 122.4 mm (tele)				
F-number	1.6 to 4.5				
Focus	Automatic or manual (built in motor)				
Optical Zoom	36× continuous				
Electronic Zoom	12× continuous, digital, interpolating				
Detector data (visual camera)					
Focal plane array (FPA)	1/4" Exview HAD CCD				
Effective pixels	380.000				
Technical specification (pan & tilt)					
Azimuth Range	Az velocity 360° continuous, 0.1 to 60°/sec max				
Elevation Range	El velocity +/- 45°, 0.1 to 30°/sec. max				
Programmable presets	128				
Automatic heaters	Clears window from ice. Switched on at +4°C (39°F). Switched off at +15°C (59°F).				
Ethernet					
Ethernet	Control, result and image				
Ethernet, type	100 Mbps				
Ethernet, standard	IEEE 802.3				
Ethernet, connector type	RJ-45				
Ethernet, communication	TCP/IP socket-based FLIR proprietary				



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Ethernet			
Ethernet, video streaming	Two independent channels for each camera		
	- MPEG-4, H.264, or M-JPEG		
Ethernet, protocols	TCP, UDP, SNTP, RTSP, RTP, HTTP, ICMP, IGMP ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour) uPnP		
Composite video			
Video out	Composite video output, NTSC compatible		
Video, standard	CVBS (SMPTE 170M NTSC)		
Power system			
Power	24 VAC (21–30 VAC; 24 VAC: 215 VA max. with heater) or 24 VDC (21–30 VDC; 24 VDC: 200 W max. with heater)		
Environmental data			
Operating temperature range	-40°C to +50°C (-40°F to +122°F)		
Storage temperature range	-40°C to +60°C (-40°F to +140°F)		
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25% C to +40°C (+77°F to +104°F)		
Directives	<ul> <li>Low voltage directive: 2006/95/EC</li> <li>EMC: 2004/108/EC</li> <li>RoHS: 2002/95/EC</li> <li>WEEE: 2002/96/EC</li> </ul>		
EMC	<ul> <li>EN 61000-6-2 (Immunity)</li> <li>EN 61000-6-3 (Emission)</li> <li>FCC 47 CFR Part 15 Class B (Emission)</li> <li>EN 61 000-4-8, L5</li> </ul>		
Encapsulation	IP 66 (IEC 60529)		
Bump	5 g, 11 ms (IEC 60068-2-27)		
Vibration	2 g (IEC 60068-2-6)		
Physical data			
Weight	18.7 kg (41.2 lb.)		
Size $(L \times W \times H)$	460 × 467 × 326 mm (18.1 × 18.4 × 12.8 in.)		
Housing material	Aluminum		
Shipping information			
Packaging, type	Cardboard box		
List of contents	<ul> <li>Infrared camera</li> <li>Printed documentation</li> <li>Small parts accessory kit</li> <li>ThermoVision System Tools &amp; Utilities CD-ROM</li> </ul>		
Packaging, weight	23.4 kg (51.6 lb.)		
Packaging, size	$670 \times 570 \times 490 \text{ mm} (26.4 \times 22.4 \times 19.3 \text{ in.})$		
EAN-13	7332558008454		



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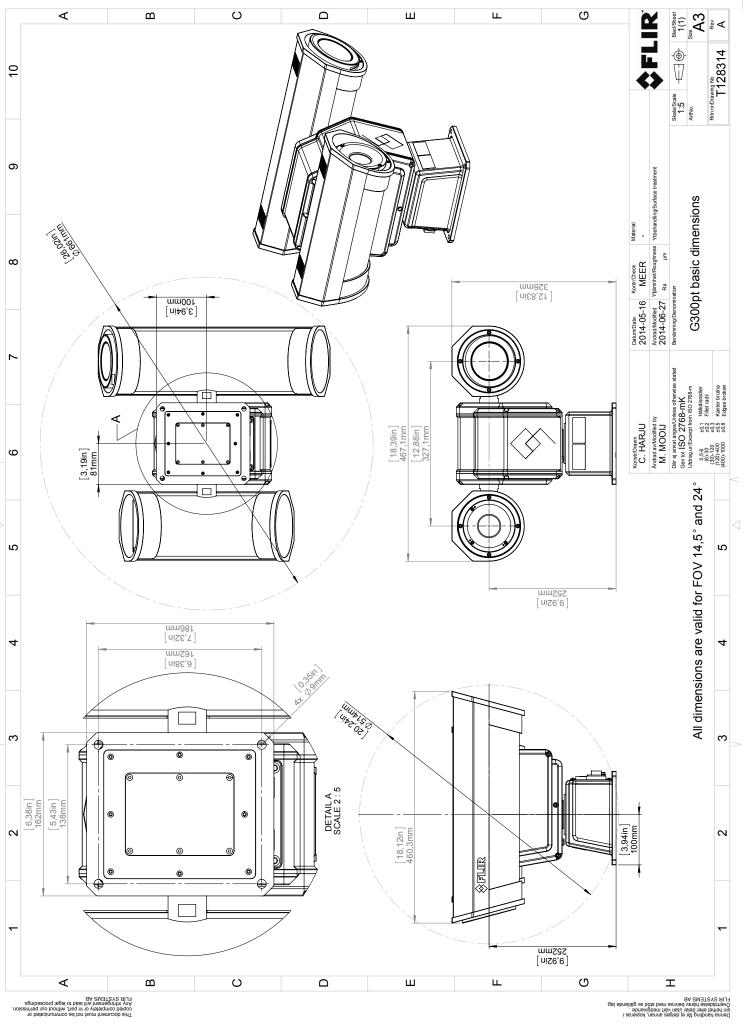
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#### Shipping information

UPC-12	845188008802	
Country of origin	Sweden	

#### Supplies & accessories:

- T911263ACC; Wall mount kit
- T911288ACC; Pole mount adapter for wall mount kit





October 29, 2014 AQ320094

### **CE Declaration of Conformity**

This is to certify that the System listed below have been designed and manufactured to meet the requirements, as applicable, of the following EU-Directives and corresponding harmonising standards. The systems consequently meet the requirements for the CE-mark.

Directives: Directive 2004/108/EC; Electromagnetic Compatibility

Standards:		
Emission:	EN 61000-6-4;	Electro magnetic Compatibility Generic standards - Emission
Immunity:	EN 61000-6-2;	Electro magnetic Compatibility; Generic standards - Immunity

System:

FLIR G300pt series

FLIR Systems AB Quality Assurance

Björn Svensson Director