

FLIR G300 a 24° fixed lens

P/N: 71502-0102

Copyright

© 2016, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

Document identity

Publ. No.: 71502-0102

Release:

Commit: 35207

Language: en-US

Modified: 2016-04-27

Formatted: 2016-04-28

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 a is a bare infrared camera unit 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 a 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 camera unit is delivered as a bare unit, and is intended for integration in OEM systems.

Benefits

- Improved efficiency: The FLIR G300 a 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 G300 a 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 a.

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)
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

P/N: 71502-0102

© 2016, FLIR Systems, Inc.

#71502-0102; r. /35207; en-US

Detector data	
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
Electronics and data rate	
Full frame rate	60 Hz
Image presentation	
Automatic image adjustment	Continuous/manual; linear or histogram based
Manual image adjustment	Level/span
Image presentation modes	
Image modes	IR image, high sensitivity mode (HSM)
Temperature ranges	
Temperature range	-20°C to +350°C (-4°F to +662°F)
Video streaming	
Non-radiometric IR video streaming	RTP/MPEG4
Data communication interfaces	
Interfaces	<ul style="list-style-type: none"> HDMI Ethernet
USB	
USB	Control and image
USB, standard	2.0 High Speed
USB, connector type	USB micro
USB, communication	TCP/IP socket-based, Microsoft RNDIS or/and USB video class
USB, video streaming	640 × 480 pixels at 30 Hz (using USB video class)
USB, image streaming	16-bit 320 × 240 at 30 Hz (using USB video class)
USB, protocols	TCP, UDP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, DHCP
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

P/N: 71502-0102

© 2016, FLIR Systems, Inc.

#71502-0102; r. /35207; en-US

Ethernet	
Ethernet, video streaming	640 × 480 pixels at up to 15 Hz MPEG-4, ISO/IEC 14496-1 MPEG-4 ASP@L5
Ethernet, image streaming	16-bit 320 × 240 pixels at up to 10 Hz
Ethernet, protocols	TCP, UDP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, DHCP, MDNS (Bonjour), SMB/CIFS
Composite video	
Video out	Digital video output (image)
Power system	
DC operation	10–28 V DC, polarity protected
Power	<ul style="list-style-type: none"> Max. power cooling down @12 V: 13 W Steady state @12 V: 9 W
Start-up time	Typically 7 min. @ 25°C (+77°F)
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	<ul style="list-style-type: none"> Low voltage directive: 2006/95/EC EMC: 2004/108/EC RoHS: 2002/95/EC WEEE: 2002/96/EC
EMC	<ul style="list-style-type: none"> EN61000-6-4 (Emission) EN61000-6-2 (Immunity) FCC 47 CFR Part 15 class A (Emission) EN 61 000-4-8, L5
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Physical data	
Weight	1.4 kg (3.1 lb.), incl. 24° lens
Cameras size, incl. lens (L × W × H)	242 × 80 × 105 mm (9.5 × 3.1 × 4.1 in.), incl. 24° lens
Housing material	Aluminum
Shipping information	
Packaging, type	Cardboard box
List of contents	<ul style="list-style-type: none"> Infrared camera Ethernet cable FLIR ThermoVision SDK (license only) FLIR VideoReport CD-ROM Lens cap Power supply Printed documentation USB cable Video cable
Packaging, weight	



FLIR G300 a 24° fixed lens

P/N: 71502-0102

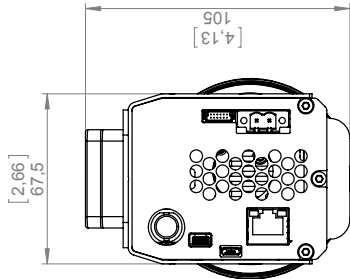
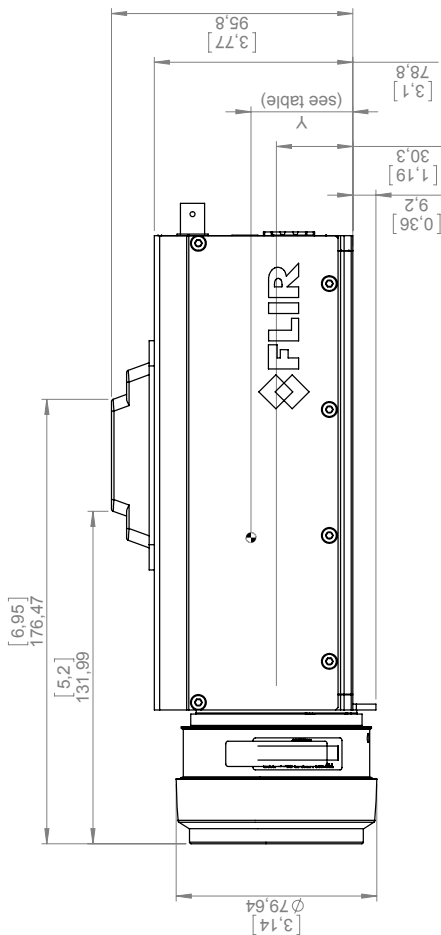
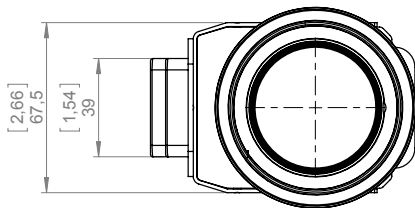
© 2016, FLIR Systems, Inc.

#71502-0102; r. /35207; en-US

Shipping information	
Packaging, size	
EAN-13	7332558008416
UPC-12	845188008765
Country of origin	Sweden



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



Center of gravity	X	Y	Z
6 deg	0	N/A	N/A
14.5 deg	0	36.5	44.66
24 deg	0	N/A	N/A

All dimensions are valid for FOV 14.5° and 24°.

Konstr/Drawn C. HARJU Andrat/modified by Mathijs Mooij Dat of ermat/angles/Unless otherwise stated Gen tot ISO 2768-mk Untraq/ISO/Exempt from ISO 2768-m	Datum/Date 2014-05-19 Andrat/Modified 2015-12-07 Benaming/Denomination	Material - Ytämteht/Roughness Ra µm	Kontr/Check FRGU Ytämteht/Roughness Ra µm	Ytämteht/Surface treatment Ytämteht/Surface treatment	
	Skalpa/Scale 1:2 Anfo.		Blad/Sheet 1(1) Size	A3	Rev B
	Ritrin m/Drawing No T198650			G300a Basic Dimensions	

Den här handling får ej delges annan, kopieras i sin helhet eller delar utan vårt medgivande.
Överträdelse härav beivras med stöd av gällande lag.
LIR SYSTEMS AB



October 29, 2014

AQ320095

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 G300a series**

FLIR Systems AB
Quality Assurance



Björn Svensson
Director