FLIR G300 pt
Multi-Sensor Optical Gas Imaging Cameras for Continuous Gas Leak Detection

Optical gas imaging cameras from FLIR can visualize and pinpoint gas leaks. With an optical gas imaging camera it is easy to continuously scan installations that are in remote areas or in zones that are difficult to access.

Continuous monitoring means that you will immediately see when a dangerous or costly gas leak appears so that immediate action can be taken. Optical gas imaging (OGI) cameras are widely used in industrial settings such as oil refineries, natural gas processing plants, offshore platforms, chemical/petrochemical industries, and biogas and power generation plants.

OGI cameras like the FLIR G300 pt can detect harmful VOC (volatile organic compounds) that can seriously harm the environment.

COOLED DETECTOR MAKES THE SMALLEST TEMPERATURE DIFFERENCES VISIBLE
FLIR G300 pt contains a cooled Indium Antimonide (InSb) detector that produces thermal images of 320 x 240 pixels. With its low F-number and low gas sensitivity G300 pt detects the smallest of leaks. The high sensitivity mode further enhances the sensitivity of the cameras so that the smallest gas leaks can be detected.

EASY TO CONTROL
FLIR G300 pt is easy to control from a safe distance. It can be fully controlled over Ethernet and easily integrated in a TCP/IP network.

AVAILABLE LENSES
The FLIR G300 pt is available with 23 mm or 38 mm lens. Longer lenses give you a narrower field of view so that you can detect gas leaks from farther away.

COMPLETE SOLUTION MOUNTED ON A PRECISE PAN/TILT MECHANISM
The FLIR G300 pt is integrated in a robust housing that is mounted on a pan/tilt mechanism. It allows the user to rotate the camera 360° continuously and to tilt it +45° or -45°. It allows monitoring different areas with the same system. Ideal if you want to monitor both gas leaks and use the system for predictive maintenance applications at the same time.

The pan/tilt has 128 preset positions, perfect for when you want to scan different areas continuously. The G300 pt is also equipped with a long-range daylight/low light camera. The video output of the thermal imaging and daylight/low light camera are simultaneously available. The daylight camera offers a 36x optical zoom.

FLIR G300 PT DETECTS THE FOLLOWING GASES:
Benzene, Ethanol, Ethylbenzene, Heptane, Hexane, Isoprene, Methanol, MEK, MIBK, Octane, Pentane, 1-Pentene, Toluene, m-xylene, Butane, Ethane, Methane, Propane, Ethylene and Propylene.
## Technical specifications FLIR G300 pt

### Imaging & Optical Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>FLIR G300 pt</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR resolution</td>
<td>320 x 240 pixels</td>
</tr>
<tr>
<td>Thermal sensitivity/NETD</td>
<td>&lt;15 mK @ +30°C (+86°F)</td>
</tr>
<tr>
<td>Field of view (FOV)</td>
<td>24° x 18” with 23 mm lens; 14.5° x 10.8” with 38 mm lens</td>
</tr>
<tr>
<td>Minimum focus distance</td>
<td>0.3 m (1.0 ft) for 23 mm lens; 0.5 m (1.6 ft) for 38 mm lens</td>
</tr>
<tr>
<td>F-number</td>
<td>1.5</td>
</tr>
<tr>
<td>Focus</td>
<td>Automatic using FLIR SDK or manual</td>
</tr>
<tr>
<td>Zoom</td>
<td>1–8x continuous, digital zoom</td>
</tr>
<tr>
<td>Digital image enhancement</td>
<td>Noise reduction filter, High Sensitivity Mode (HSM)</td>
</tr>
</tbody>
</table>

### Detector data

- **Detector type**: Focal Plane Array (FPA), cooled InSb
- **Spectral range**: 3.2–3.4 μm

### Ethernet

- **Ethernet type**: Control, result and image
- **Ethernet standard**: 100 Mbps
- **Ethernet connector type**: RJ-45
- **Ethernet, communication**: TCP/IP socket-based FLIR proprietary
- **Ethernet, video streaming**: Two independent channels for each camera: MPEG-4, H.264 or MJPEG
- **Ethernet, image streaming**: NA
- **Ethernet, protocols**: TCP, UDP, RTSP, RTP, HTTP, IGMP, MDNS (Bonjour), SMB/CIFS, SNTP, SMTP, DHCP, uPnP

### Composite video

- **Video out**: Composite video out, PAL/NTSC compatible

### Imaging and optical data (visual camera)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>FLIR G300 pt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focal length</td>
<td>57.8° (H) to 1.7° (H) / 3.4 mm (wide) to 122.4 mm (tele)</td>
</tr>
<tr>
<td>F-number</td>
<td>1.6 to 4.5</td>
</tr>
<tr>
<td>Focus</td>
<td>Automatic or manual (built in motor)</td>
</tr>
<tr>
<td>Optical Zoom</td>
<td>36x continuous</td>
</tr>
<tr>
<td>Electronic Zoom</td>
<td>12x continuous, digital, interpolating</td>
</tr>
</tbody>
</table>

### Detector data (visual camera)

- **Detector type**: Focal Plane Array (FPA) / Effective pixels: 1/4" Exview HAD CCD / 380,000

### Technical specification (pan & tilt)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>FLIR G300 pt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azimuth Range A velocity</td>
<td>360° continuous, 0.1 to 60°/sec max</td>
</tr>
<tr>
<td>Elevation Range E velocity</td>
<td>+/- 45°, 0.1 to 30°/sec max</td>
</tr>
<tr>
<td>Programmable presets</td>
<td>128</td>
</tr>
<tr>
<td>Automatic heaters</td>
<td>Prevent window to ice up. Switched on at +4°C (39°F). Switched off at +15°C (59°F).</td>
</tr>
</tbody>
</table>

### Power system

- **DC operation**: 24 VAC (21-30 VAC, 24 VAC: 216 VA max with heater) or 24 VDC (21-30 VDC: 24 VDC: 200 W max. with heater)

### Environmental data

- **Operating temperature range**: -25°C to +50°C (-13°F to +122°F)
- **Storage temperature range**: -30°C to +60°C (-22°F to +140°F)
- **Humidity (operating and storage)**: IEC60068-2-30; 24 h 95% relative humidity; +25°C to +40°C (+77°F to +104°F) (2 cycles)
- **EMC**: EN61000-2-2, EN61000-2-3, EN61000-4-4, EN61000-4-6, EN61000-4-8
- **Encapsulation**: IP 66
- **Bump**: 5g, 11 ms (IEC 60068-2-27)
- **Vibration**: 2g (IEC 6068-2-6)

### Physical data

- **Weight**: 18.7 kg (41.2 lb.)
- **Camera size, excl. lens (L x W x H)**: 460 x 467 x 326 mm (18.1 x 18.4 x 12.8 in.)
- **Housing material**: Aluminum

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Your authorized FLIR distributor:

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