# FLIR GF306

## For Gas Leak Detection of the "Greenhouse Gas" $SF_6$ and Electrical Inspections

*FLIR GF306 is an infrared camera capable of finding Sulfur Hexafluoride ($SF_6$), the "greenhouse gas" with an estimated atmospheric lifetime of 3,200 years.*

- *Real time visualization of gas leaks*
- *Finds $SF_6$ leaks quickly & safely*
- *Considerably reduced inspection time*
- *Trace leaks to their source*
- *Perform safer inspections*

- *Internal data/video storage*
- *Digital camera & GPS*
- *High performance LCD & Tiltable high resolution viewfinder*
- *Multi-angle handle with integrated direct access buttons*

**Visualizes gas leaks in real time**
FLIR GF306 scans large areas rapidly and pinpoints leaks in real time. It is ideal for monitoring plants that is difficult to reach with contact measurement tools. Literally thousands of components can be scanned per shift without the need to interrupt the process. It reduces repair downtime and provides verification of the process. And above all it is exceptionally safe, allowing potentially dangerous leaks to be monitored from several meters away.

FLIR GF306 will significantly improve your work safety, environmental and regulatory compliance, not to mention helping to improve the bottom line by finding leaks that essentially decrease profits.
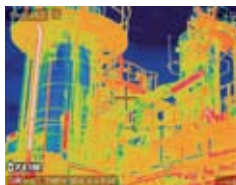
Detects the following gases:

- Sulfur Hexafluoride ($SF_6$)
- Acetyl Chloride
- Acetic Acid
- Allyl Bromide
- Allyl Chloride
- Allyl Fluoride
- Ammonia ($NH_3$)
- Bromomethane

- Chloride Dioxide
- Ethyl Cyanoacrylate
- Ethylene
- Furan
- Hydrazine
- Methylsilane
- Methyl Ethyl Ketone
- Methyl Vinyl Ketone

- Propenal
- Propene
- Tetrahydrofuran
- Trichloroethylene
- Uranyl Fluoride
- Vinyl Chloride
- Vinyl Cyanide
- Vinyl Ether

Captured $SF_6$ leak

Tiltable, flip-out 4.3" High Contrast Color LCD allows you to view targets more safely from any angle.

**Applications:**

Electrical Utility

Petrochemical & Chemical industries

Automatic (one Touch) and Manual Focus with 1-8x continuous digital zoom helps you to deliver the perfect picture at ease.

# FLIR GF306 Technical Specifications

| Imaging and optical data | |
|---|---|
| Field of view (FOV) / Minimum focus distance | 24° × 18° / 0.3 m |
| Lens identification | Automatic |
| F-number | 1.5 |
| Thermal sensitivity/NETD | <25 mK @ +30°C |
| 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) |
| Focal Plane Array (FPA) / Spectral range | Cooled QWIP / 10–11 μm |
| IR resolution | 320 × 240 pixels |
| Detector pitch | 30 μm |
| Sensor cooling | Stirling Microcooler (FLIR MC-3) |

| 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 modes | IR-image, visual image, High Sensitivity Mode (HSM) |

| Measurement | |
|---|---|
| Temperature range | –40 to +500°C |

| Set-up | |
|---|---|
| Menu commands | Level, span |
| | Auto adjust continuous/manual/semi-automatic |
| | Zoom |
| | Palette |
| | Start/stop recording |
| | Store image |
| | Playback/recall image |
| Set-up commands | 1 programmable button, local adaptation of units, language, date and time formats |
| Web interface | Admin camera setup and viewing IR images |

| Storage of images | |
|---|---|
| Image storage type | Removable SD or SDHC Memory Card, two card slots |
| Image storage capacity | > 1200 images (JPEG) with post process capability per GB on memory card |
| 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 |
| GPS | Location data automatically added to every image from built-in GPS |

| Video recording and streaming | |
|---|---|
| Non radiometric IR-video recording | MPEG4/H.264 (up to 60 minutes/clip) to memory card. |
| | Visual image can automatically be associated with corresponding recording of non radiometric IR-video. |
| Non radiometric IR-video streaming | RTP/H.264 |

| Digital camera | |
|---|---|
| Built-in digital camera | 3.2 Mpixel, auto focus, and two video lamps |
| Digital camera video recording | MPEG4/H.264 (25 minutes/clip) to memory card |

| Laser pointer | |
|---|---|
| Laser | Activated by dedicated button |

| Data communication interfaces | |
|---|---|
| USB, standard | USB Mini-B: 2.0 High Speed |
| Video | Digital Video Output (image) |

| Power system | |
|---|---|
| Battery type | Rechargeable Li Ion battery |
| Battery voltage | 7.2 V |
| Battery operating time | > 2 hours at 25°C 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 |
| DC operation | 10.8 to 16V DC, polarity protected (proprietary protected) |
| Power | 12,5 W typically |
| Start-up time | < 7 min. @ 25°C |

| Environmental data | |
|---|---|
| Operating temperature range | –20°C to +40°C |
| Storage temperature range | –30°C to +60°C |
| Humidity (operating and storage) | IEC 68-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) (2 cycl) |
| Directives | 73/23EEC |
| | 89/336/EEC |
| | 2002/95/EC |
| | 2002/96/EC |
| EMC | EN61000-6-3 (Emission) |
| | EN61000-6-2 (Immunity) |
| | FCC 47 CFR Part 15 class B (Emission) |
| | EN 61 000-4-8, L5 |
| | EN/UL/CSA 60950-1 |
| Encapsulation | IP 54 (IEC 60529) |
| Bump | 25 g (IEC 60068-2-29) |
| Vibration | 2 g (IEC 60068-2-6) |

| Physical data | |
|---|---|
| Camera weight, incl. lens and battery | 2.48 kg |
| Battery weight | 0.24 kg |
| Cameras size, incl. lens (L × W × H) | 306 × 169 × 161 mm |
| Tripod mounting | Standard, ¼"-20 |
| Housing material | Aluminium, Magnesium |
| Grip material | TPE Thermoplastic Elastomers |

| Scope of delivery |
|---|
| Infrared camera |
| Standard Lens, 14.5° (Ge) |
| Shipping case |
| Lens cap (mounted on lens) |
| Lens cap strap, 2 ea. |
| Shoulder strap |
| Batteries 2 ea. (1 of the batteries inside camera) |
| Charger |
| Power supply |
| Power supply cord |
| HDMI cable |
| HDMI-DVI cable |
| USB cable |
| SD card |
| SD card adapter (connects via USB to PC) |
| Getting Started Guide (printed) |
| Manual for GF-series on CD |
| Video Report 1.0 with manual on CD |

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