# FLIR A6604

## Thermal Imaging Camera 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.

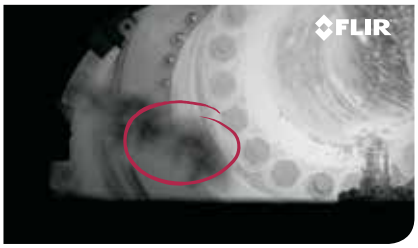
OGI cameras like the FLIR A6604 can detect harmful greenhouse gases that can seriously harm the environment.

### COOLED DETECTOR MAKES THE SMALLEST TEMPERATURE DIFFERENCES VISIBLE

FLIR A6604 contains a cooled Indium Antimonide (InSb) detector that produces thermal images of 640 x 512 pixels. More pixels give you a wider field of view so that you can monitor larger installations. It also offers an ultra-crisp image.

The high sensitivity mode further enhances the detection level of the camera so that the smallest gas leaks can be detected.


Captured gas leak.




A leaking flange.

### EASY TO CONTROL

FLIR A6604 is easy to control from a safe distance. It can be fully controlled over Ethernet and easily integrated in a TCP/ IP network. The FLIR A6604 is GigE Vision and GenICam compatible.

### FLIR A6604 DETECTS THE FOLLOWING GASES:

Benzene, Ethanol, Ethylbenzene,Heptane, Hexane, Isoprene, Methanol, MEK, MIBK, Octane, Pentane, 1-Pentene, Toluene, Xylene, Butane, Ethane, Methane, Propane, Ethylene and Propylene.

## Technical specifications FLIR A6604

| Imaging & Optical Data | FLIR A6604 |
|---|---|
| IR resolution | 640 x 512 pixels |
| Thermal sensitivity/NETD | <20 mK @ +30°C (+86°F) |
| Field of view (FOV) v | 21.4° x 17.5° with 25 mm lens, 11.0° x 8.9° with 50 mm lens, 5.5° x 4.4° with 100 mm lens |
| Minimum focus distance | NA |
| F-number | NA |
| Focus | Manual |
| Zoom | 1x or 2x digital |
| Digital image enhancement | High Sensitivity mode |
| **Detector data** | |
| Detector type | Focal Plane Array (FPA), cooled InSb |
| Spectral range | 3.2–3.4 µm |
| **Image presentation** | |
| Automatic image adjustment | Continuous/manual; linear or histogram based |
| Manual image adjustment Level/span | Level/span |
| **Image presentation modes** | |
| Image modes | IR-image, High Sensitivity Mode (HSM) |
| **Electronics and data rate** | |
| Full frame rate | Full window 60 Hz, 1/2 window 240 Hz, 1/4 window 480 Hz |
| **Temperature ranges** | |
| Temperature range | –20°C to +350°C (–4°F to +662°F) ; up to 1,500 C (2732 F) or up to 2,000 C (3,662 F) optional |
| **Ethernet** | |
| Ethernet | Control, image |
| Ethernet, type | 1 Gbps |
| Ethernet, standard | IEEE 802.3 |
| Ethernet, connector type | RJ-45 |
| Ethernet, communication | Communication TCP/IP |
| Ethernet, video streaming | Video streaming, NTSC, PAL |
| Ethernet, image streaming | Image streaming, GigE Vision |
| Ethernet, protocols | Protocols, GigE Vision |
| **Data communication interfaces** | |
| Interfaces | Gigabit Ethernet (GEV/Genicam compatible) |
| **Composite video** | |
| Video out | NTSC / PAL |
| **Power system** | |
| DC operation | 24 VDC, 24 W max. |
| Start-up time | Typically 7 min. @ 25°C (+77°F) |

| Environmental data | |
|---|---|
| Operating temperature range | –40°C to +50°C |
| Storage temperature range | –55°C to +68°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 | Low voltage directive: 2006/95/EC / EMC: 2004/108/EC / RoHS: 2002/95/EC / WEEE: 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 50 |
| Bump | 40g, 11msec half sine puls |
| Vibration | 4.3g RIMS random vobration 3-axes |
| **Physical data** | |
| Weight | 2.3 kg (5 lbs) |
| Camera size, excl. lens (L x W x H) | 196 x 102 x 102 mm (7.7" x 4.0" x 4.0") |
| Housing material | Aluminum |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