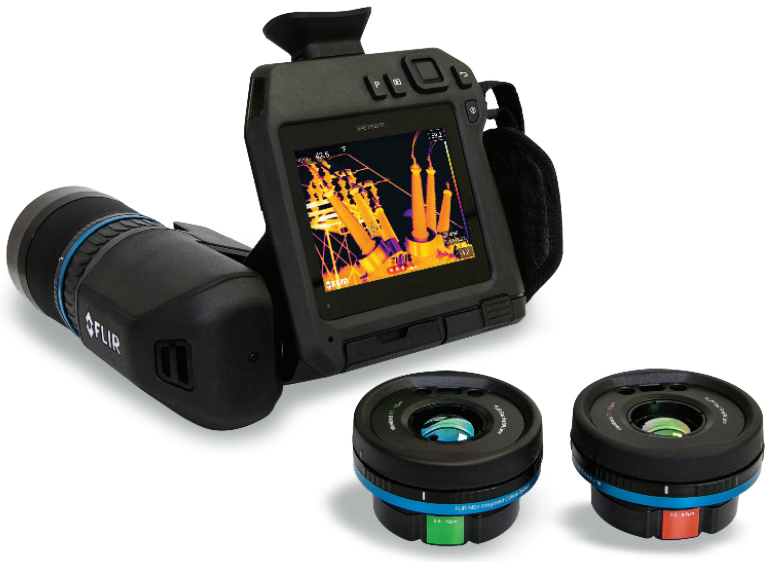


GAS FIND IR SERIES

# FLIR GF77™

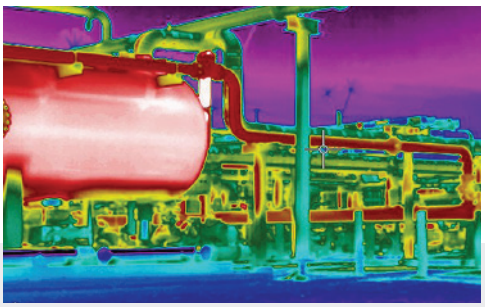
The FLIR GF77 is a groundbreaking uncooled optical gas imaging camera with interchangeable lens options that detect methane ($CH_4$), sulfur hexafluoride ($SF_6$), ethylene ($C_2H_4$), ammonia ($NH_3$), and other gas emissions. Capable of both gas detection and radiometric temperature measurement, the GF77 is an ideal inspection tool for electric power utilities, oil and natural gas operations, chemical/manufacturing facilities, the food and agriculture industry, and first responders. This camera offers unmatched versatility as well as improved visualization of gas emissions and thermal inspections. Based on the award-winning design of the FLIR T-Series platform, the GF77 offers a vibrant, 4-inch touchscreen LCD, 180° rotating optical block, and eyepiece for convenience in direct sunlight. This affordable solution offers the benefit of built-in thermographic calibrations and the flexibility to detect a wide range of gases by simply changing lenses.

www.flir.com/GF77

## MAXIMIZE EFFICIENCY

Locate gas leaks and perform thermal inspections with one camera

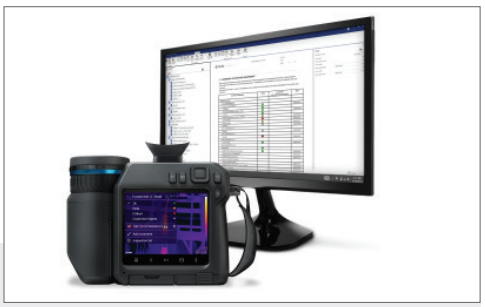
- Visualize $CH_4$, $SF_6$, $NH_3$, and $C_2H_4$ in different wavelengths with a versatile lens solution, and inspect critical components using the built-in thermal imager
- Scan for emissions from a safe distance and track them to the source to begin repairs immediately
- Take accurate temperature measurements in all environments from -20°C to 500°C with ±3°C or 3% temperature accuracy
- Switch to viewfinder in bright, sunlit conditions to ensure optimal viewing



## AFFORDABLE OPTICAL GAS IMAGING

Provide every site with one or more GF77 cameras with industry-leading features

- Improve gas-detection contrast with 1-Touch Level/Span auto-adjustment feature
- Increase leak detectability by activating FLIR patented High Sensitivity Mode (HSM)
- Precisely resolve target area with laser-assisted autofocus
- Use data from the built-in area measurement tool to calculate tank level and volume



## STREAMLINE INSPECTIONS AND REPORTING

Work easier with the ergonomic design, rapid-reporting features, and tools to organize findings in the field

- Define routes and improve inspection flow with the optional add-on of FLIR Thermal Studio Pro and FLIR Route Creator*
- Automatically tag each image file with GPS geolocation data for easy identification
- Connect instantly over Wi-Fi to mobile devices for data transfer and reporting

* Please see compatible software section on back for full details

## SPECIFICATIONS

| | Low-Range (LR) Lens | High-Range (HR) Lens |
|---|---|---|
| **Image and Optical Data** | | |
| Primary gases detected | Methane, nitrous oxide, propane, sulfur dioxide, R-134a and R-152a | Sulfur hexafluoride, ammonia, ethylene |
| Lens spectral range | 7 to 8.5 µm | 9.5 to 12 µm |
| Gas sensitivity (NECL) | $CH_4$: <100 ppm × m<br>$N_2O$: <75 ppm × m<br>$C_3H_8$: <400 ppm × m<br>$SO_2$: <30 ppm × m<br>R-134a: <20 ppm × m<br>R-152a: <100 ppm × m<br><br>(ΔT = 10°C, Distance = 1 m) | $SF_6$: <1 ppm × m<br>$C_2H_4$: <20 ppm × m<br>$NH_3$: <20 ppm × m<br><br>(ΔT = 10°C, Distance = 1 m) |
| Infrared resolution | 320 × 240 (76,800 pixels) | |
| Thermal sensitivity (NETD) | 25° lens: <25 mK at 30°C (86°F)<br>6° lens: <40 mK at 30°C (86°F) | |
| UltraMax® (super-resolution) | Yes | |
| Field of view (FOV) | 25° lens: 25° × 19°<br>6° lens: 6.4° × 4.9° | |
| Focal length | 25° lens: 18 mm (0.71 in)<br>6° lens: 74 mm (2.9 in) | |
| f/number | 25° lens: 1.04<br>6° lens: 1.35 | |
| Focus modes | Continuous LDM, One-shot LDM, One-shot contrast, Manual | |
| Minimum focus distance | 25° lens: 0.3 m (0.98 ft)<br>6° lens: 5 m (16.4 ft) | |
| Minimum focus distance with MSX® | 25° lens: 0.65 m (2.1 ft)<br>6° lens: N/A | |
| Spatial resolution (IFOV) | 25° lens: 1.4 mrad/pixel<br>6° lens: 0.36 mrad/pixel | |
| Lens identification | Automatic | |
| Digital zoom | 1–6× continuous | |
| Detector type and pitch | Uncooled microbolometer, 25 µm | |
| **Measurement and Analysis** | | |
| Temperature ranges and accuracy | Range -20 to 70°C (-4 to 158°F): ±3°C (±5.4°F) | Range -20 to 70°C (-4 to 158°F): ±2°C (±3.6°F) |
| | Range 0 to 250°C (32 to 482°F):<br>• 0 to 100°C (32 to 212°F): ±3°C (±5.4°F)<br>• 100 to 250°C (212 to 482°F): ±3%<br>Range 100 to 500°C (212 to 932°F): ±3%<br>For ambient temperature 15 to 35°C (59 to 95°F) | |
| Spotmeter and area | 3 each in live mode | |
| Measurement presets | No measurement, Center spot, Hot spot, Cold spot, User preset 1, and User preset 2 | |
| **Image Presentation and Frame Rate** | | |
| Image frequency | 30 Hz | |
| Display | 4", 640 × 480 pixels (VGA) touchscreen LCD with auto-rotation | |
| Digital camera | 5 MP with built-in LED photo/video lamp | |
| Color palettes | Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC | |
| Image modes | Infrared, visual, MSX, picture-in-picture, gallery | |

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com

| | |
|---|---|
| Image adjustment | Automatic, Automatic maximum, Automatic minimum, High Sensitivity Mode (HSM), Manual, 1-Touch Level/Span |
| Image annotations | Voice, Text, Image sketch (IR only), Sketch (from touchscreen), GPS Automatic image tagging |
| **Image Storage** | |
| Storage media | Removable SD card |
| Image file format | Standard JPEG, measurement data included. Infrared-only mode |
| Time lapse (Infrared) | 10 seconds to 24 hours (infrared) |
| Remote control operation | Via USB or over Wi-Fi connected to FLIR Thermal Studio |
| **Video Recording and Streaming** | |
| Radiometric IR video recording | Real-time radiometric recording (.csq) |
| Non-radiometric IR or visual video | H.264 to memory card |
| Radiometric IR video streaming | Compressed, over UVC |
| Non-radiometric IR video streaming | H.264, MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi |
| Communication interfaces | USB 2.0, Bluetooth, Wi-Fi, DisplayPort |
| **Additional Specifications** | |
| Battery | Rechargeable Li-ion battery, >4 hours at 25°C (68°F) with typical use |
| Operating temperature range | -15°C to 50°C (5°F to 122°F) |
| Storage temperature range | -40°C to 70°C (-40 to 158°F) |
| Shock/Vibration/ Encapsulation | 25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6) / IP54 |
| Camera weight with lens (including battery) | 1.54 kg (3.4 lb) w/ 25° lens<br>1.77 kg (3.9 lb) w/ 6° lens |
| Camera size (L × W × H) | Camera with 25° lens:<br>• Lens vertical: 150.5 × 201.3 × 84.1 mm (5.9 × 7.9 × 3.3 in)<br>• Lens horizontal: 150.5 × 201.3 × 167.3 mm (5.9 × 7.9 × 6.6 in)<br>Camera with 6° lens:<br>• Lens vertical: 204.6 × 201.3 × 84.1 mm (8.1 × 7.9 × 3.3 in)<br>• Lens horizontal: 150.5 × 201.3 × 167.3 mm (5.9 × 7.9 × 6.6 in) |

### Package Contents

Infrared camera with lens, power supply for battery charger, power supply 15 W/3 A, printed documentation, SD card (8 GB), USB 2.0 A to USB Type-C cable, USB Type-C to HDMI and PD adapter, USB Type-C to USB Type-C cable (USB 2.0 standard), lens cap strap, lens cleaning cloth, neck strap, small eyecup, battery (2x), battery charger, hard transport case, lens cap front, lens cap front and rear (only for extra lenses)

### Optional Compatible Software

| | |
|---|---|
| FLIR Thermal Studio Pro | Advanced analysis and reporting software—12-Month Subscription |
| FLIR Route Creator* | The FLIR Route Creator Plugin for FLIR Thermal Studio Pro allows you to create and export inspection routes - 12-Month Subscription |
| FLIR Inspection Route | Required to generate inspections routes into FLIR Thermal Studio Pro - One time purchase<br><br>The FLIR Inspection Route can also be used independently to generate routes in .xml file format for upload into users existing routing software. |

*Need to purchase FLIR Thermal Studio Pro and FLIR Inspection Route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