



# FLIR G609

## High Resolution Furnace and Boiler Inspection Camera



### Key Features:

- Filtered to see through flames for clear inspections of furnaces, heaters, and boilers
- Detachable heat shield for increased operator protection and ease of use
- High resolution detector for enhanced image clarity and accurate measurements

### Main Applications:

- Industrial furnace and boiler inspections
- Chemical and petrochemical plant monitoring
- Utility industry maintenance and safety checks

[www.FLIR.com/G609](http://www.FLIR.com/G609)

### SPECIFICATIONS

| Imaging and optical                |   |
|------------------------------------|---|
| Thermal Lens options               | 24° furnace, 6° lenses  |
| IR resolution                      | 640 × 480 pixels  |
| Field of view (FOV)                | 24°   |
| Focal length                       | 23 mm   |
| Minimum focus distance             | 0.3 m (1.0 ft)  |
| F-number                           | 2.9   |
| Focus                              | Autofocus, manual focus   |
| Zoom                               | 1 – 8× continuous, digital zoom   |
| Detector type                      | Focal plane array (FPA), cooled InSb  |
| Detector pitch                     | 15 μm   |
| Sensor cooling                     | Stirling Microcooler (FLIR MC-3)  |
| Image presentation modes           | IR image, visual image  |
| Color palettes                     | <ul style="list-style-type: none"> <li>• Arctic</li> <li>• White hot</li> <li>• Black hot</li> <li>• Iron</li> <li>• Lava</li> <li>• Rainbow</li> <li>• Rainbow HC</li> </ul> |
| Radiometric IR video recording     | RTRR .csq (compressed) & .seq 15 hz (uncompressed)  |
| Non-radiometric IR or visual video | H.264 compression to memory card, .mpeg4 file format  |
| Radiometric IR video streaming     | Over UVC  |
| Non-radiometric IR video streaming | <ul style="list-style-type: none"> <li>• H.264 (AVC) over RTSP (Wi-Fi)</li> <li>• MPEG4 over RTSP (Wi-Fi)</li> <li>• MJPEG over UVC and RTSP (Wi-Fi)</li> </ul>               |
| Visual recording                   | H.264 to memory card  |

| Viewfinder                     | Built-in, tiltable OLED, 800 × 480 pixels  |
|--------------------------------|--|
| Built-in digital camera        | 5 MP   |
| Measurement and analysis       |  |
| Thermal sensitivity/NETD       | 20 mK @ 30°C (86°F)  |
| Measurement temperature range  | -20°C to 1500°C (-4°F to 2732°F)   |
| Accuracy                       | ±1°C (±1.8°F) for temperature range 0°C, to 100°C (32°F to 212°F) or ±2% of reading for temperature range >100°C (>212°F)                                  |
| Spotmeter                      | 10   |
| Area                           | 5 boxes with max./min./average   |
| Profile                        | 1 line (horizontal or vertical)  |
| Measurement corrections        | Reflected temperature, distance, atmospheric transmission, humidity, external optics   |
| Languages                      | 21   |
| Communication and data storage |  |
| FLIR Inspection Route          | Enabled in the camera  |
| Cloud services (via Wi-Fi)     | FLIR Ignite for direct, secure image uploading, organizing, storage, and sharing (required firmware available), wireless file transfer via userweb library |
| Bluetooth                      | Communication with headset   |
| Storage media                  | Removable SD memory card   |
| Image file formats             | Standard JPEG, measurement data included. Infrared-only mode.  |
| Communication interfaces       | USB 2.0, Bluetooth®, Wi-Fi, HDMI   |
| Video out                      | HDMI 640 × 480, HDMI 1280 × 720, DVI 640 × 480, DVI 800 × 600  |
| <b>(continued)</b>             |  |

For more information contact: [Sales@TeledyneFLIR.com](mailto:Sales@TeledyneFLIR.com)  
or to find your local support number, visit: [flir.com/contactsupport](http://flir.com/contactsupport)

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited.

©2024 Teledyne FLIR, LLC. All rights reserved.

Revised 10/11/24  
G609\_Datasheet-LTR\_RH24-0667-INS



# FLIR G609

## High Resolution Furnace and Boiler Inspection Camera

### SPECIFICATIONS

|   |   |
|---|---|
| Radio                                   | <p>Operating frequency</p> <ul style="list-style-type: none"> <li>• Bluetooth + EDR: 2402–2480 MHz</li> <li>• WLAN 2.4 GHz: 2412–2462 MHz</li> <li>• WLAN 5 GHz: 5150-5250 MHz Note that frequency band 5150-5250 MHz is for indoor use only, see national regulations.</li> </ul> <p>RF output (EIRP)</p> <ul style="list-style-type: none"> <li>• Bluetooth + EDR: &lt;10 dBm</li> <li>• WLAN: &lt;17 dBm</li> </ul> <p>Antenna</p> <ul style="list-style-type: none"> <li>• Integrated PIFA antenna (gain: maximum 2.6 dBi)</li> </ul> |
| Recording modes                         | Multi-REC, Periodic storage   |
| <b>General</b>                          |   |
| Package size                            | 600 mm × 510 mm × 410 mm (23.6 in × 20.1 in × 16.1 in)  |
| Package weight                          | 14.2 kg (31.3 lb)   |
| Camera size (L × W × H)                 | 251.6 mm × 164.5 mm × 170.9 mm (9.9 in × 6.48 in × 6.73 in)   |
| Camera weight                           | 3.0 kg (6.61 lb)  |
| Mounting interface                      | UNC ¼"-20   |
| GPS                                     | Location data automatically added to every still image and first frame in video from built-in GPS   |
| Laser pointer                           | Class 2 Semiconductor AlGaInP diode laser, 1 mW, 635 nm (red)   |
| <b>User interface</b>                   |   |
| Display                                 | 640 × 480 pixels (VGA)  |
| Display frame rate                      | 60 Hz   |
| Voice                                   | 60 seconds with Bluetooth on still images and video   |
| Text                                    | Text from predefined list or soft keyboard on touchscreen   |
| Image sketch                            | Yes: on infrared images   |
| <b>Power</b>                            |   |
| Battery type                            | Rechargeable Li-Ion battery   |
| Battery weight                          | 232 g (8.2 oz.)   |
| Battery voltage                         | 7.4 V   |
| Battery capacity                        | 5.5 Ah  |
| Battery operating time                  | >2 hours at 25°C (+68°F) and typical use  |
| Battery charging time                   | 2.5 h to 95% capacity, charging status indicated by LEDs  |
| Battery code                            | UN3481  |
| Startup time                            | Typically 7 min. @ 25°C (77°F)  |
| Battery documents                       | For documents like MSDS and UN38.3 test reports/summaries, see: <a href="https://support.flir.com/resources/msds">https://support.flir.com/resources/msds</a>   |
| <b>Environmental and certifications</b> |   |
| 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                                | IEC 60068-2-30 / 24 h 95% Relative Humidity 25°C to 40°C (77°F to 104°F) (2 cycles)   |
| ROHS and Reach Directive                | 2011/65/EU  |
| WEEE                                    | 2012/19/EU  |
| RoHS                                    | 2011/65/EU  |
| RED                                     | 2014/53/EU  |

|                             |  |
|-----------------------------|--|
| EMC                         | <ul style="list-style-type: none"> <li>• ETSI EN 301 489-1 (radio)</li> <li>• ETSI EN 301 489-17</li> <li>• EN 55032 (emission)</li> <li>• EN 55035 (immunity)</li> <li>• EN 61000-4-8 Level 5 (magnetic field)</li> <li>• EN 61000-6-2, Immunity Industrial Environment</li> <li>• FCC 47 CFR part 15 B, class B (emission)</li> <li>• ICES-003</li> </ul>  |
| Radio spectrum              | <ul style="list-style-type: none"> <li>• ETSI EN 300 328</li> <li>• ETSI EN 301 893</li> <li>• FCC 47 CFR part 15 C</li> <li>• FCC 47 CFR part 15 E</li> <li>• RSS-247</li> </ul>  |
| Encapsulation               | IP54 (IEC 60529)   |
| Shock                       | 25 g (IEC 60068-2-27)  |
| Vibration                   | 2 g (IEC 60068-2-6)  |
| <b>Warranty and service</b> |  |
| Warranty                    | <a href="http://support.flir.com/g609">support.flir.com/g609</a>   |
| <b>Ordering</b>             |  |
| P/N                         | 15902-0101   |
| What's included             | <ul style="list-style-type: none"> <li>• G609 infrared camera with lens</li> <li>• Battery, 2 pcs.</li> <li>• Battery charger</li> <li>• Power supply</li> <li>• Hand strap</li> <li>• Neck strap</li> <li>• Lens cap</li> <li>• Lens cap strap</li> <li>• Memory card</li> <li>• HDMI-HDMI cable</li> <li>• USB cable</li> <li>• Screwdriver TX20</li> <li>• Knob screw (optional screw for the rear cover)</li> <li>• Printed documentation</li> <li>• Hard transport case</li> <li>* Camera body "lens" cap</li> <li>• Heatshield with skirt and pouch</li> </ul> |

Specifications are subject to change without notice. For the most up-to-date specs, go to [www.flir.com](http://www.flir.com)



**IMT INTERMOUNTAIN TECHNOLOGIES**  
 Mike Gray  
 801-716-7777  
[mgray@imtechnologies.com](mailto:mgray@imtechnologies.com)

For more information contact: [Sales@TeledyneFLIR.com](mailto:Sales@TeledyneFLIR.com)  
 or to find your local support number, visit: [flir.com/contactsupport](http://flir.com/contactsupport)

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited.

©2024 Teledyne FLIR, LLC. All rights reserved.

Revised 10/11/24  
 G609\_Datasheet-LTR\_RH24-0667-INS