



# 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
(continued)	

For more information and to find your local support number, visit:  
**FLIR.com/contactsupport**  
**www.FLIR.com**

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-A4\_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="https://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](https://www.flir.com)



For more information and to find your local support number, visit:  
**FLIR.com/contactsupport**  
**www.FLIR.com**

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-A4\_RH24-0667-INS