

FLIR GF343 24° Fixed lens

P/N: 65702-0102

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Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

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| | |
|---|---|
| General description | |
| The new FLIR GF343 is an optical gas camera for visualizing carbon dioxide (CO ₂). With this camera you can quickly and easily find gas leaks where CO ₂ is the main component. | |
| Key features: | |
| <ul style="list-style-type: none"> • Visualizes gas leaks in real time. • Inspects without interruption of process. • Traces leaks to their source. | |
| Carbon capture and storage—stop the escalation of global warming: | |
| <ul style="list-style-type: none"> • A global transition to a sustainable low-carbon economy is a necessity. • Global energy demand is still dominated by fossil fuels being combusted in quantities incompatible with levels required to stabilize greenhouse gases concentrations at safe levels in the atmosphere. | |
| CO ₂ (R744)—the new environmental friendly refrigerant: | |
| <ul style="list-style-type: none"> • Air-conditioning for cars—replaces R134a. • CO₂-based heat pumps. • Electrical power—replaces sulfur hexafluoride. | |
| CO ₂ —a harmless tracer gas: | |
| <ul style="list-style-type: none"> • Use CO₂ to trace leaks. | |
| Note | |
| The CO ₂ background level in the atmosphere varies between about 400 ppm (e.g., outdoors) to 5000 ppm (e.g., very high levels indoors), and the ability to see a CO ₂ leak using the FLIR GF343 depends on this gas concentration and also on the distance to the target. For example, an outdoor leak at a distance of 10 m (33') adds 4000 ppm × m to the gas concentration length. | |
| Imaging and optical data | |
| IR resolution | 320 × 240 pixels |
| Thermal sensitivity/NETD | <15 mK @ +30°C (+86°F) |
| Field of view (FOV) | 24° × 18° |
| Minimum focus distance | 0.3 m (1.0 ft.) |
| Focal length | 23 mm (0.89 in.) |
| Lens identification | Automatic |
| F-number | 1.5 |
| 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) |
| Detector data | |
| Detector type | Focal plane array (FPA), cooled InSb |
| Spectral range | Built-in cold band pass filter 4.2–4.4 μm |
| Detector pitch | 30 μm |



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| Detector data | |
|--------------------------------------|---|
| Sensor cooling | Stirling Microcooler (FLIR MC-3) |
| Detects following gases | Carbon dioxide |
| 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 presentation modes | |
| Image modes | IR image, visual image, high sensitivity mode (HSM) |
| Set-up | |
| Menu commands | Level, span Auto adjust continuous/manual/semi-automatic Zoom Palette Start/stop recording Store image Playback/recall image |
| Color palettes | Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC |
| Set-up commands | 1 programmable button, overlay recording mode, local adaptation of units, language, date and time formats |
| Storage of images | |
| Storage media | 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 |
| Geographic Information System | |
| GPS | Location data automatically added to every image from built-in GPS |
| Video recording in camera | |
| Radiometric IR video recording | *.seq video clips to memory card (7.5 and 15 Hz). |
| Non-radiometric IR video recording | MPEG4 (up to 60 minutes/clip) to memory card. Visual image can automatically be associated with corresponding recording of non-radiometric IR video. |
| Visual video recording | MPEG4 (25 minutes/clip) to memory card |



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| Video streaming | |
|------------------------------------|---|
| Radiometric IR video streaming | Full dynamic to PC using USB cable or to mobile devices using Wi-Fi. PC software capable of displaying the video stream include the following: <ul style="list-style-type: none">• FLIR IR Camera Player• FLIR ResearchIR• FLIR Tools |
| Non-radiometric IR video streaming | RTP/MPEG4 |
| Digital camera | |
| Built-in digital camera | 3.2 Mpixels, auto focus, and two video lamps |
| Laser pointer | |
| Laser | Activated by dedicated button |
| Laser classification | Class 2 |
| Laser type | Semiconductor AlGaInP diode laser, 1 mW, 635 nm (red) |
| USB | |
| USB | <ul style="list-style-type: none">• USB-A: Connect external USB device• USB Mini-B: Data transfer to and from PC |
| USB, standard | USB Mini-B: 2.0 high speed |
| Composite video | |
| Video out | Digital video output (image) |
| Power system | |
| Battery type | Rechargeable Li ion battery |
| Battery voltage | 7.2 V |
| Battery capacity | 4.4 Ah |
| Battery operating time | > 3 hours at 25°C (+77°F) 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 |
| External power operation | AC adapter 90–260 VAC, 50/60 Hz or 12 V from a vehicle (cable with standard plug, optional) |
| DC operation | 10.8 to 16 V DC, polarity protected (proprietary protected) |
| Power | 8.5 W typically |
| Start-up time | Typically 7 min. @ 25°C (+77°F) |
| Environmental data | |
| 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 (operating and storage) | IEC 68-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) (2 cycles) |
| Directives | <ul style="list-style-type: none">• 73/23EEC• 2004/108/EC• 2002/95/EC• 2002/96/EC |



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| Environmental data | |
|---|---|
| EMC | <ul style="list-style-type: none">EN61000-6-4 (Emission)EN61000-6-2 (Immunity)FCC 47 CFR Part 15 class A (Emission)EN 61 000-4-8, L5 |
| Encapsulation | IP 54 (IEC 60529) |
| Shock | 25 g (IEC 60068-2-27) |
| Vibration | 2 g (IEC 60068-2-6) |
| Safety | Power supply: EN/UL/IEC 60950-1 |
| Physical data | |
| Camera weight, excl. lens and battery | 1.94 kg (4.27 lb.) |
| Camera weight, incl. lens and excl. battery | 2.24 kg (4.94 lb.) |
| Camera weight, incl. lens and battery | 2.48 kg (5.47 lb.) |
| Battery weight | 0.24 kg (0.52 lb.) |
| Camera size, excl. lens (L x W x H) | 284 x 169 x 161 mm (11.2 x 6.7 x 6.3 in.) |
| Cameras size, incl. lens (L x W x H) | 306 x 169 x 161 mm (12.0 x 6.7 x 6.3 in.) |
| Battery size (L x W x H) | 141 x 47 x 28 mm (5.5 x 1.8 x 1.1 in.) |
| Battery charger size (L x W x H) | 158 x 122 x 25 mm (6.2 x 4.8 x 1.0 in.) |
| Tripod mounting | UNC ¼"-20 |
| Housing material | Aluminum, magnesium |
| Grip material | TPE thermoplastic elastomers |
| Shipping information | |
| Packaging, type | Cardboard box |
| List of contents | <ul style="list-style-type: none">Infrared camera with lensBattery chargerBattery, 2 ea.Hard transport caseHDMI-DVI cableHDMI-HDMI cableLens cap (mounted on lens)Memory cardPower supply, incl. multi-plugsPrinted documentationShoulder strapUSB cableWi-Fi USB micro adapter (depending on CE and FCC regulations regarding wireless equipment for your country) |
| Packaging, weight | |
| Packaging, size | 400 x 190 x 510 mm (15.7 x 7.5 x 20.1 in.) |
| EAN-13 | 7332558008485 |
| UPC-12 | 845188008840 |
| Country of origin | Sweden |

Supplies & accessories:

- T199367ACC; Battery Li-ion 7.2 V, 4.4 Ah, 32 Wh
- T199183ACC; Battery Li-ion 7.2 V, 4.4 Ah, 32 Wh
- T130007; Extended Calibration Certificate
- T199233; FLIR Atlas SDK for .NET
- T199234; FLIR Atlas SDK for MATLAB



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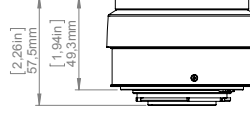
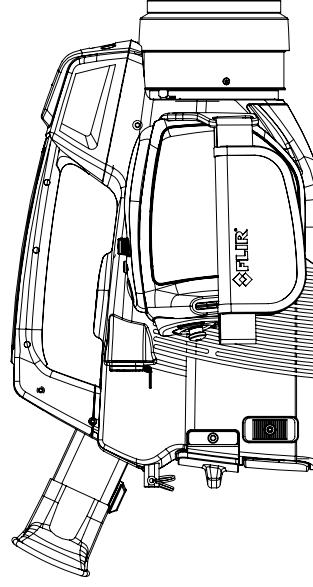
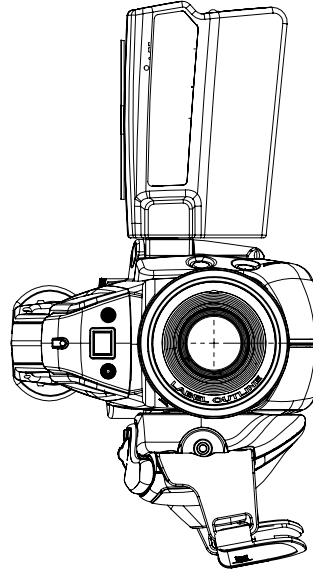
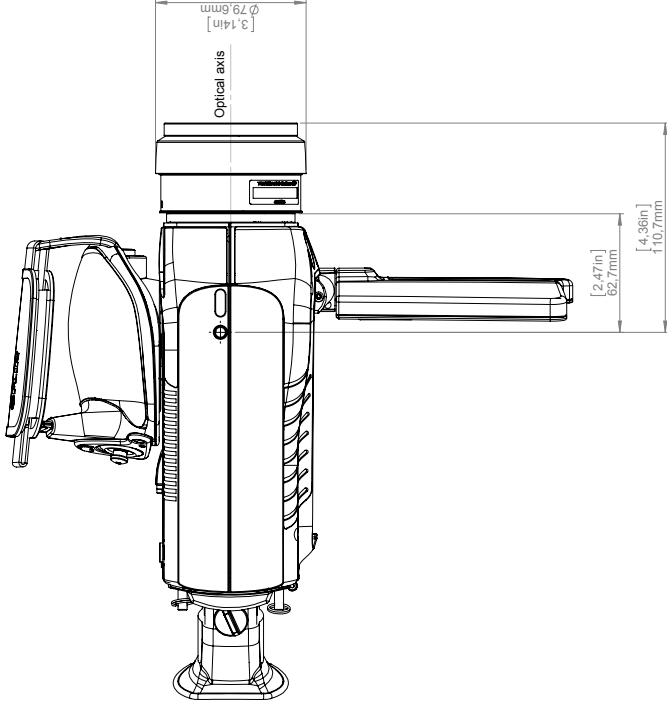
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- INST-EW-0230; Extended Warranty 1 Year for GF3xx, GFX320, G300pt, GF620, SC670X
- INST-EWGM-0210; Premium Service Package for A6604, GF3xx-series, GFX320, G300pt, GF620, GasFindIR HSX, GasFindIR LW, SC4000
- INST-GM-0175; General Maintenance Package for G300a, GF3xx

**Camera with Lens IR f=23 mm (24°)
Camera with Lens IR f=38 mm (14,5°)**



For additional dimensions see page 1

| | | | |
|---|------------------|-------|-------------------------------|
| Modified | Drawn by | Size | |
| 2013-02-18 | R&D Thermography | A3 | |
| Check | Drawn by | Scale | |
| | R&D Thermography | 1:2 | |
| Denomination Basic dimension FLIR GF3xx | | | Drawing No. 1127603 |

