

P/N: 63909-0904

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Document identity

Publ. No.: 63909-0904

Release:

Commit: 40418

Language: en-US

Modified: 2017-02-16

Formatted: 2017-02-16

Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

Disclaimer

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General description

The FLIR Ex series cameras are point-and-shoot infrared cameras that give you access to the infrared world. A FLIR Ex series camera is an affordable replacement for an infrared thermometer, providing a thermal image with temperature information in every pixel. The new MSX and visual formats make the cameras incomparably easy to use.

The FLIR Ex series cameras are user-friendly, compact, and rugged, for use in harsh environments. The wide field of view makes them the perfect choice for building applications.

Benefits:

- Easy to use: The FLIR Ex series cameras are fully automatic and focus-free with an intuitive interface for simple measurements in thermal, visual, or MSX mode.
- Compact and rugged: The FLIR Ex series cameras' low weight of 0.575 kg and the accessory belt pouch make them easy to bring along at all times. Their rugged design can withstand a 2 m drop test, and ensures reliability, even in harsh environments.
- Ground breaking affordability: The FLIR Ex series cameras are the most affordable infrared cameras on the market.

Imaging and optical data

IR resolution	120 × 90 pixels
Thermal sensitivity/NETD	<0.10°C (0.27°F) / <100 mK
Field of view (FOV)	45° × 34°
Minimum focus distance	0.5 m (1.6 ft.)
Spatial resolution (IFOV)	6.9 mrad
F-number	1.5
Image frequency	9 Hz
Focus	Focus free

Detector data

Detector type	Focal plane array (FPA), uncooled microbolometer
Spectral range	7.5–13 μm

Image presentation

Display	3.0 in. 320 × 240 color LCD
Image adjustment	Automatic adjust/lock image



FLIR E5 (incl. Wi-Fi)

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Image presentation modes	
Image modes	Thermal MSX, Thermal, Picture-in-Picture, Thermal blending, Digital camera.
Multi Spectral Dynamic Imaging (MSX)	IR image with enhanced detail presentation
Picture-in-Picture	IR area on visual image
Measurement	
Object temperature range	-20°C to +250°C (-4°F to +482°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F)
Measurement analysis	
Spotmeter	Center spot
Area	Box with max./min.
Isotherm	Above/below/interval
Emissivity correction	Variable from 0.1 to 1.0
Emissivity table	Emissivity table of predefined materials
Reflected apparent temperature correction	Automatic, based on input of reflected temperature
Set-up	
Color palettes	Black and white, iron and rainbow
Set-up commands	Local adaptation of units, language, date and time formats
Storage of images	
File formats	Standard JPEG, 14-bit measurement data included
Digital camera	
Digital camera, resolution	640 × 480
Digital camera, FOV	55° × 43°
Data communication interfaces	
Interfaces	USB Micro: Data transfer to and from PC and Mac device
Wi-Fi	Peer-to-peer (ad hoc) or infrastructure (network)
Radio	
Wi-Fi	<ul style="list-style-type: none"> • Standard: 802.11 b/g/n • Frequency range: <ul style="list-style-type: none"> ◦ 2400–2480 MHz ◦ 5150–5260 MHz • Max. output power: 15 dBm
Power system	
Battery type	Rechargeable Li ion battery
Battery voltage	3.6 V
Battery operating time	Approx. 4 hours at +25°C (+77°F) ambient temperature and typical use
Charging system	Battery is charged inside the camera or in specific charger.



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Power system	
Charging time	2.5 hours to 90% capacity in camera. 2 hours in charger.
Charging temperature	10°C to +45°C (+50°F to +113°F)
Power management	Automatic shut-down
AC operation	AC adapter, 90–260 VAC input, 5 VDC output to camera

Environmental data	
Operating temperature range	–15°C to +50°C (+5°F to +122°F)
Storage temperature range	–40°C to +70°C (–40°F to +158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity
EMC	<ul style="list-style-type: none">• WEEE 2012/19/EC• RoHs 2011/65/EC• C-Tick• EN 61000-6-3• EN 61000-6-2• FCC 47 CFR Part 15 Class B
Radio spectrum	<ul style="list-style-type: none">• Standard: 802.11 b/g/n• Frequency range:<ul style="list-style-type: none">◦ 2400–2480 MHz◦ 5150–5260 MHz• Max. output power: 15 dBm
Encapsulation	IP 54 (IEC 60529)
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Drop	2 m (6.6 ft.)

Physical data	
Camera weight, incl. battery	0.575 kg (1.27 lb.)
Camera size (L × W × H)	244 × 95 × 140 mm (9.6 × 3.7 × 5.5 in.)
Color	Black and gray

Certifications	
Certification	UL, CSA, CE, PSE and CCC

Shipping information	
Packaging, type	Cardboard box
List of contents	<ul style="list-style-type: none">• Infrared camera• Hard transport case• Battery (inside camera)• USB cable• Power supply/charger with EU, UK, US and Australian plugs• Printed documentation
Packaging, weight	2.9 kg (6.4 lb.)
Packaging, size	385 × 165 × 315 mm (15.2 × 6.5 × 12.4 in.)
EAN-13	4743254002876
UPC-12	845188014124
Country of origin	Estonia

Supplies & accessories:

- T911093; Tool belt



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- T198528; Hard transport case FLIR Ex-series
- T198530; Battery
- T198531; Battery charger incl power supply
- T198532; Car charger
- T198534; Power supply USB-micro
- T198529; Pouch FLIR Ex and ix series
- T198533; USB cable Std A <-> Micro B
- T199362ACC; Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh
- T198583; FLIR Tools+ (download card incl. license key)
- T199233; FLIR Atlas SDK for .NET
- T199234; FLIR Atlas SDK for MATLAB