

Technical Data

FLIR E8

Part number:

63903-0303

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Corporate Headquarters

FLIR Systems, Inc. 27700 SW Parkway Ave. Wilsonville, OR 97070

Telephone: +1-503-498-3547

Website

http://www.flir.com

Customer support

http://support.flir.com

Legal disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply.

Information and equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited.



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 also building applications.

- Easy to use: The Flir Ex series cameras are fully automatic and focus-free with an intuitive interface for simple
- measurement in thermal, visual, or MSX mode.

 Compact and rugged: The Flir Ex series cameras' low weight of 0.575 kg and accessory belt pouch make them easy to bring along at all times. Their rugged design that can withstand a 2 m drop test ensures reliability, even in harsh
- Ground breaking affordability: The Flir Ex series cameras are the most affordable infrared cameras on the market.

Imaging and optical data IR resolution 320 x 240 pixels Thermal sensitivity/NETD <0.06°C (0.11°F) / <60 mK Field of view (FOV) 45° × 34° Minimum focus distance 0.5 m (1.6 ft.) Spatial resolution (IFOV) 2.6 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 x 240 color LCD
Image adjustment	Automatic adjust/lock image

Weasurement	
Object temperature range	-20°C to +250°C (-4°F to +482°F)
Accuracy	$\pm 2^{\circ} C$ ($\pm 3.6^{\circ} F)$ or $\pm 2\%$ 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.
Emissivity correction	Variable from 0.1 to 1.0

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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
Data communication interfaces	
Interfaces	USB Micro: Data transfer to and from PC and Mac device
Power system	
Battery type	Rechargeable Li Ion battery
Battery voltage	3.7 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.
Charging time	2.5 hours to 90% capacity in camera. 2 hours in charger.
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	 WEEE 2012/19/EC RoHs 2011/65/EC
	 C-Tick
	EN 61000-6-3EN 61000-6-2
	FCC 47 CFR Part 15 Class B
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
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	UL 004 05 P05 1000
Certification	UL, CSA, CE, PSE and CCC
Shipping information	Hard eaco
Packaging, type	Hard case

- USB cable
 Power supply/charger with EU, UK, US and Australian plugs
 Battery charger
 User documentation CD-ROM
 Printed documentation
 FLIR Tools download card

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Optional Accessories

- T911093 Tool belt
 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

Optional Software

T198583 FLIR Tools+ (license only)

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T911093; Tool belt



General description

Tool bolt for EUD assessment		
Tool belt for FLIR camera pouches.		
Technical data		
Weight	0.117 kg (0.26 lb.)	
Length	1.44 m (4.7 ft.)	
Color	Black	
Shipping information		
Tool belt		
EAN-13	4743254000384	
UPC-12	845188003210	
		v1.02

T198528; Hard transport case FLIR Ex-series



General description

Hard transport case for FLIR Ex-series	
Technical data	
Weight	1.75 kg (3.86 lb.)
Size (L × W × H)	$303 \times 206 \times 128 \text{ mm} (11.9 \times 18.1 \times 5.0 \text{ in.})$
Color	Black
Shipping information	
Packaging, weight	1.750 kg
Packaging, size	303 × 206 × 128 mm
EAN-13	4743254001022
UPC-12	845188004873

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T198530; Battery



General description

High capacity battery for the IR camera.

Technical data

Battery type	Rechargeable Li Ion battery
Battery voltage	3.7 V
Battery capacity	2.6 Ah at +20°C (+68°F)
Battery note	Approximate lithium content: 0.7 g
Charging system	Battery is charged inside the camera or in separate charger
Charging temperature	0°C to +45°C (+32°F to +113°F)
Battery storage temperature range	-40°C to +70°C (-40°F to +158°F)

Shipping information

EAN-13	4743254001046
UPC-12	845188004897

T198531; Battery charger incl power supply



General description

Battery charger incl. power supply.

Technical data

AC operation	90-264 VAC, 50/60 Hz, output 5.0 VDC, 2.1 A
Power	10.5 W
Size (L × W × H)	58.0 × 38.0 × 31.0 mm (2.3 × 1.5 × 1.2 in.)
Battery charger size (L × W × H)	82.0 × 56.0 × 64.0 mm (3.2 × 2.2 × 2.5 in.)
Cable length	1.2 m (3.9 ft.)

Shipping information

EAN-13	4743254001053
UPC-12	845188004903

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T198532; Car charger



General description

T198534; Power supply USB-micro



General description

Power supply USB-micro.	
Technical data	
AC operation	90-264 VAC, 50/60 Hz, output 5.0 VDC, 2.1 A
Power	10.5 W
Size $(L \times W \times H)$	$58.0 \times 38.0 \times 31.0 \text{ mm} \ (2.3 \times 1.5 \times 1.2 \text{ in.})$
Cable length	1.2 m (3.9 ft.)
Shipping information	
EAN-13	4743254001084
UPC-12	845188004934

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T198529; Pouch FLIR Ex and ix series



General description

deficial description			
Pouch, including shoulder strap, for FLIR Ex and ix series.			
Technical data			
Size $(L \times W \times H)$	270.0 × 145.0 × 115.0 mm (10.6 × 5.7 × 4.5 in.)		
Color	Black		
Shipping information			
PouchShoulder strap			
EAN-13	4743254001039		
UPC-12	845188004880		

T198533; USB cable Std A <-> Micro B



General description

This cable is used to connect the infrared camera with a computer, using the USB protocol.

Technical dataWeight60 g (2.1 oz.)Cable length1.8 m (5.9 ft.)ConnectorStandard USB-A to USB Micro-B

Shipping information EAN-13 4743254001077 UPC-12 845188004927

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Optional Software

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T198583; FLIR Tools+ (license only)



General description

Compared to FLIR Tools, FLIR Tools+ has the following features:

- Radiometric Panorama incl. MSX
- Radiometric IR Video Recording

- Advanced Reporting
FLIR Tools/Tools+ is a software suite specifically designed to provide an easy way to update your camera and create inspection reports.

FLIR Tools+ main features:

- Manual IR/Visual Image Grouping
- Radiometric Panorama incl. MSX
- Radiometric IR Video Recording
- Advanced Reporting Microsoft Office 2007 (32bit), and 2010 (32bit) support Report templates (horizontal IR + DC, vertical IR + DC, horizontal IR + IR). Import images from your camera to your computer.

- Apply filters when searching for images
- Search all text in images and text annotations. Store the five latest search criteria's.
- Lay out, move, and resize measurement tools on any infrared image.
- Create PDF imagesheets of any images of your choice. Add headers, footers, and logos to imagesheets.
- Create PDF reports for images of your choice.
- Add headers, footers, and logos to reports. Report editor (report page preview and snap to grid).
- Sort function (by date, groups sorted by path, and groups sorted by date).
- Browse and purchase infrared cameras, software, and accessories in the webshop. Software localized to 21 languages.
- Support for MSX (Multi-Spectral Dynamic Imaging) Images
- Support for Sketch Images on both IR and Visual with toggling ON/OFF feature. Support for Same FOV (Field of View Match)
 Display of Compass Information in Edit and in Report.
 Display of GPS Information in Edit and in Report.
 Microsoft Windows 7 (32- and 64-bit) and Windows 8 (32- and 64-bit)

- Camera update (applies to FLIR Ex, Kxx, Exx and T6xx series only).

Download

Download your copy of FLIR Tools+ here:

http://support.flir.com/toolsplus

Release notes

New features News in 4.1: Previous/next in Edit mode. Clone in the Library. Extract visual photo from a multispectral image. Import *.mp4, *.seq, and *.csq files from the camera. Playback/edit *.seq and *.csq files. Scale enhancement for the FLIR GF3xx series. Auto resize of thumbnails during importing for the FLIR T6xx series. Grouping/ungrouping now added. Various bug fixes.	Version	FLIR Tools+ 4.1
	New features	 Previous/next in Edit mode. Clone in the Library. Extract visual photo from a multispectral image. Import *.mp4, *.seq, and *.csq files from the camera. Playback/edit *.seq and *.csq files. Scale enhancement for the FLIR GF3xx series. Auto resize of thumbnails during importing for the FLIR T6xx series. Grouping/ungrouping now added.

Shipping information

FLIR Tools+ scratchcard



Optional Software

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Operating system	Windows XP, 32-bit Windows Viets 33 bit	
	Windows Vista, 32-bitWindows 7, 32-bit	
	Windows 7, 64-bit	
	 Windows 8, 32-bit 	
	 Windows 8, 64-bit 	
Software requirements	 Office 2007, 32-bit 	
	 Office 2010, 32-bit 	
	 Office 2013, 32-bit 	

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