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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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FLIR E5 (incl. Wi-Fi)

P/N: 63909-0904

Document identity

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Website

http://www.flir.com

Customer support

http://support.flir.com

Disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions.

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

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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	• Standard: 802.11 b/g/n
	• Frequency range:
	  ◦ 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	• 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	• Standard: 802.11 b/g/n • Frequency range: ◦ 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	• 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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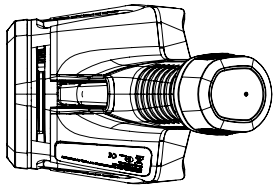
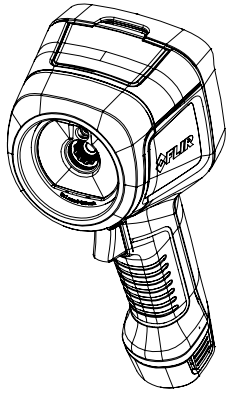
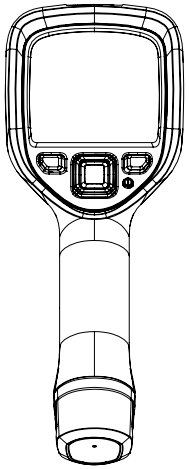
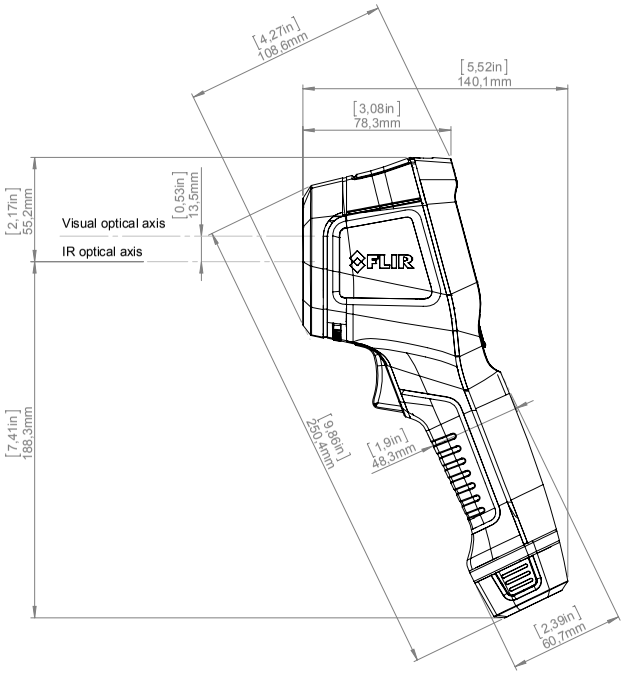
- T198528; Hard transport case FLIR Ex-series
- T198530; Battery
- T198531; Battery charger incl power supply
- T198532; Car charger
- T198534; Power supply USB-micro
- T198529; Pouch FLIR Ex and ix series
- T198533; USB cable Std A <-> Micro B
- T199362ACC; Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh
- T198583; FLIR Tools+ (download card incl. license key)
- T199233; FLIR Atlas SDK for .NET
- T199234; FLIR Atlas SDK for MATLAB

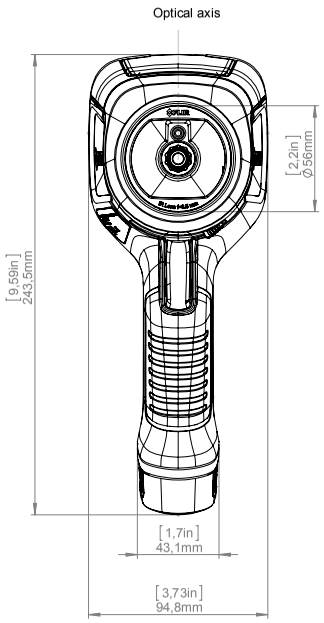
Camera with built-in IR lens f=6,5 mm (45°)

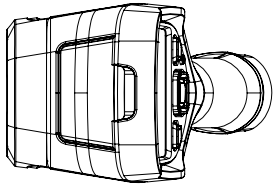












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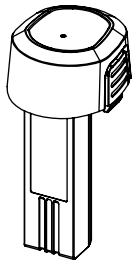
Modified	Check	Drawn by
2013-03-25	CAHA	R&D Thermography

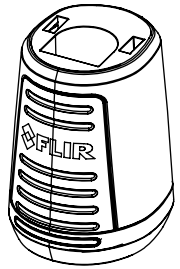
Denomination

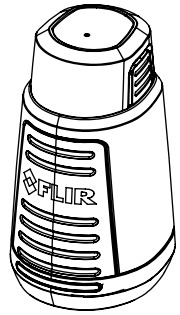
Basic dimensions FLIR Ex

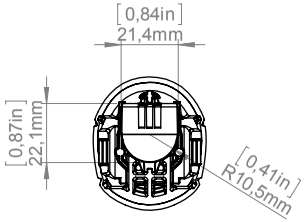
Size	Sheet
A2	1(2)
Scale 1:2	
Drawing No. T127831	Size A

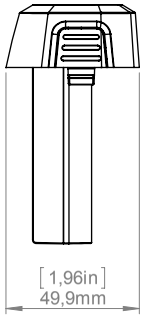
Charger and Power pack

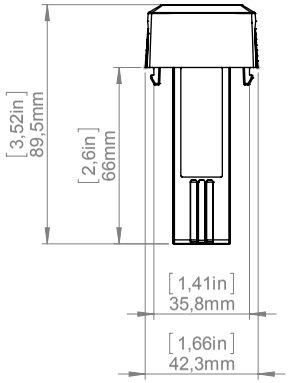


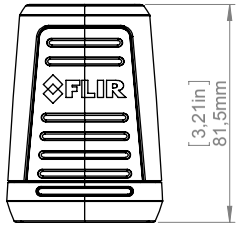


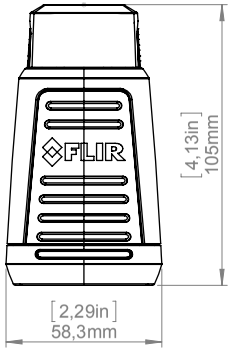


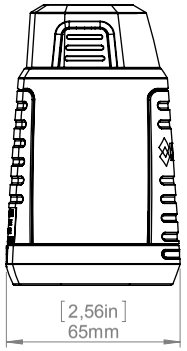


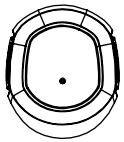


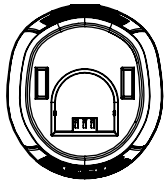


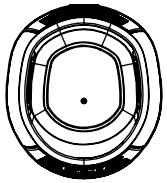












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2013-03-25	CAHA	R&D Thermography

Denomination

Basic dimensions FLIR Ex

Size	Sheet
A3	2(2)

Scale 1:2

Drawing No.	Size
T127831	A

FLIR | The World's Sixth Sense™

February 24, 2017 Täby, Sweden AQ320224

CE Declaration of Conformity – EU Declaration of Conformity

Product: FLIR EX -series

Name and address of the manufacturer:
FLIR Systems AB
PO Box 7376
SE-187 15 Täby, Sweden

This declaration of conformity is issued under the sole responsibility of the manufacturer.
The object of the declaration: FLIR EX -series.
The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Directives:

Directive	2014/30/EU	Electromagnetic Compability
Directive	2014/35/EU	Low Voltage Directive (Power Supply)
Directive	2012/19/EU	Waste electrical and electric equipment
Directive:	2011/65/EU	RoHS
Directive	1999/5/EC	Radio and Telecommunications Terminal Equipment

Standards:

Emission:	EN 61000-6-3/A1:2011	Electromagnetic Compability Generic standards – Emission
Immunity:	EN 61000-6-2:2005	Electromagnetic Compability Generic standards – Immunity
Restricted substances (RoHS):	EN 50581:2012	Technical documentation
Radio:	ETSI EN 300 328 ETSI EN 301 893	Harmonized EN covering essential requirements of the R&TTE Directive
Safety (Power supply):	EN 60950	Information technology equipment

FLIR Systems AB
Quality Assurance

Lea Dabiri
Quality Manager