

P/N: 63902-0302

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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

imaging and optical data		
IR resolution	240 × 180 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)	3.4 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	



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Image presentation				
Display	3.0 in. 320 × 240 color LCD			
Image adjustment	Automatic/Manual			
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)			
	10°C to 550°C (50°F to +1022°F)			
Accuracy	$\pm 2^{\circ}$ C ($\pm 3.6^{\circ}$ F) or $\pm 2\%$ of reading, for ambient temperature 10°C to 35°C ($\pm 50^{\circ}$ F to 95°F) and object temperature above $\pm 0^{\circ}$ C ($\pm 32^{\circ}$ F)			
Measurement analysis				
Spotmeter	Center spot			
Area	Box with max./min.			
Isotherm	Above alarm, Below alarm			
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			
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.	
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	 EN 61000-6-2 (Immunity) EN 61000-6-3 (Emission) FCC 47 CFR Part 15 Class B (Emission) RCM 	
Hazardous substances	WEEE 2012/19/EURoHs 2011/65/EU	
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.)	
Safety	Camera: IEC/EN60950-1	
	Power supply: UL, CSA, CE, PSE, CCC, and SAA	
Physical data		
Camera weight, incl. battery	0.575 kg (1.27 lb.)	
Camera size (L \times W \times H)	244 × 95 × 140 mm (9.6 × 3.7 × 5.5 in.)	
Color	Black and gray	
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	4743254003989	
UPC-12	845188018764	
Country of origin	Estonia	

Supplies & accessories:

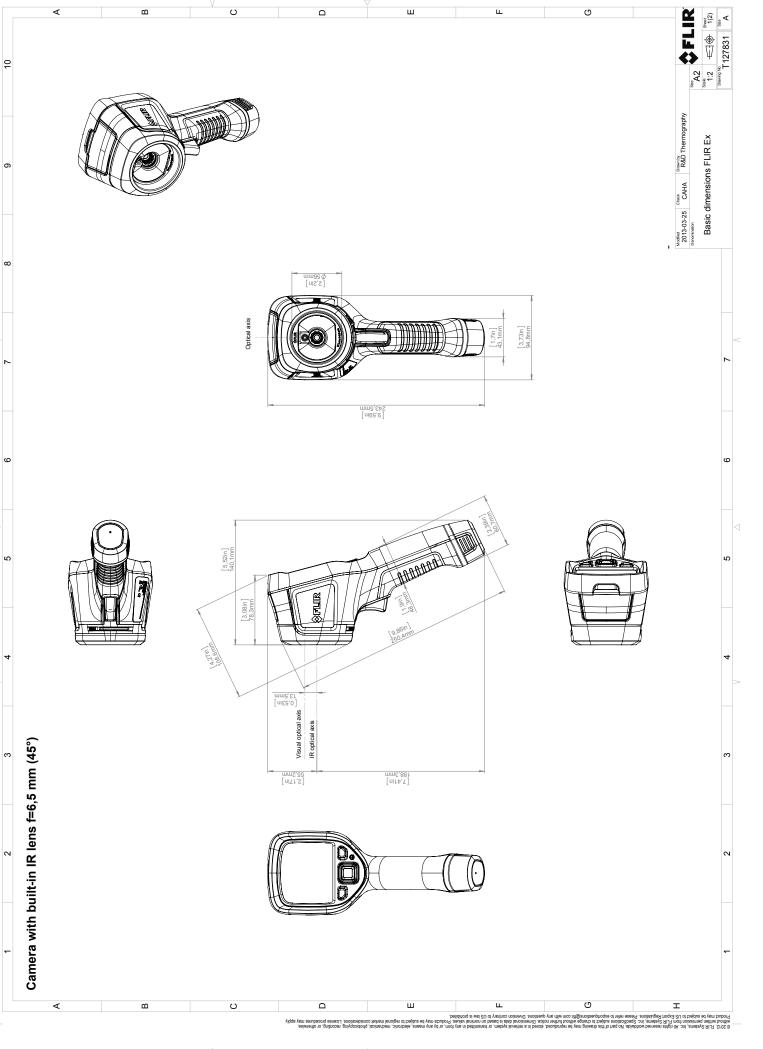
- T911093; Tool belt
- T911689ACC; Pouch for FLIR E-series
- T198528; Hard transport case FLIR Ex-series



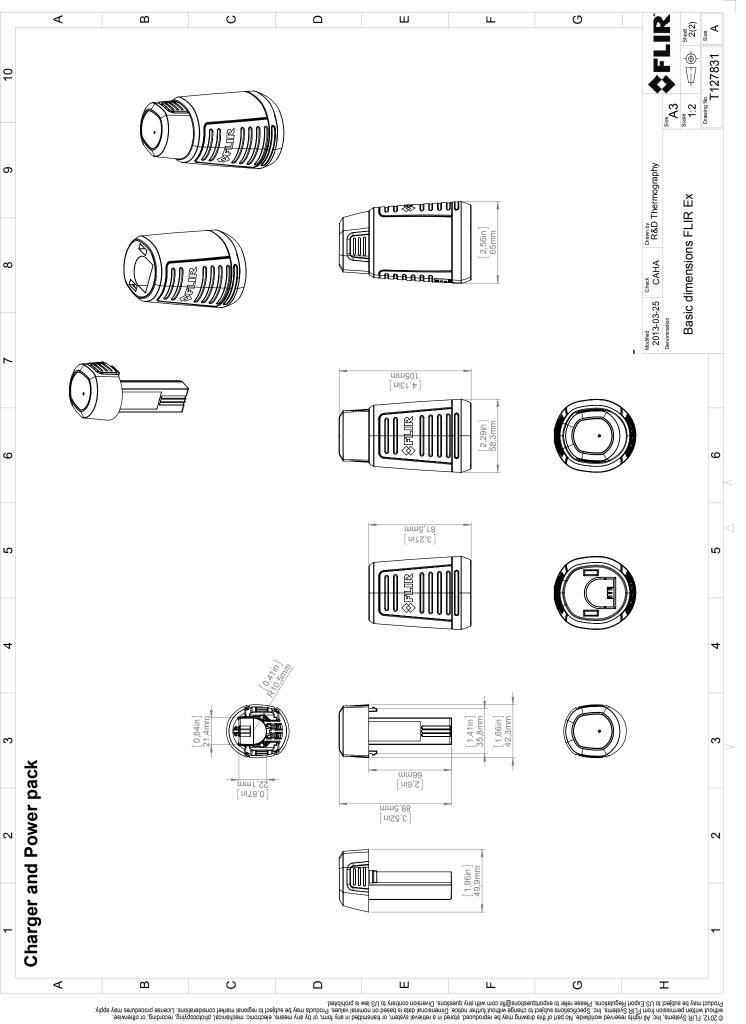
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- T198531; Battery charger incl power supply
- T198532; Car charger
- T198534; Power supply USB-micro
- T198529; Pouch FLIR Ex and ix series
- T198533; USB cable Std A <-> Micro B
- T199362ACC; Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh
- T198583; FLIR Tools+ (download card incl. license key)
- T199233; FLIR Atlas SDK for .NET
- T199234; FLIR Atlas SDK for MATLAB
- INST-EW-0125; Extended Warranty 1 Year for A5, A15, E6, E8
- INST-EWGM-0120; Premium Service Package for A5, A15, E6, E8
- INST-GM-0120; General Maintenance Package for A5, A15, E6, E8



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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	Harmonized EN covering essential
	ETSI EN 301 893	requirements of the R&TTE Directive
Safety (Power supply):	EN 60950	Information technology equipment

FLIR Systems AB Quality Assurance

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Lea Dabiri Quality Manager

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