Technical Data
FLIR E5

Part number:
63905-0501

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Legal disclaimer

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

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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 also for building applications.

Benefits:

- 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 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 x 240 color LCD
Image adjustment	Automatic adjust/lock 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.
Emissivity correction	Variable from 0.1 to 1.0

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Measurement analysis	
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 61000-6-3 • EN 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	
Certification	UL, CSA, CE, PSE and CCC

Shipping information	
Packaging, type	Hard case

- Infrared camera
- Hard transport case
- Battery (inside camera)
- USB cable
- Power supply/charger with EU, UK, US and Australian plugs
- User documentation CD-ROM
- Printed documentation
- FLIR Tools download card

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Optional Accessories

- 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-series
- T198533 USB cable

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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 × 206 × 128 mm (11.9 × 18.1 × 5.0 in.)
Color	Black

Shipping information	
Packaging, weight	1.750 kg
Packaging, size	303 × 206 × 128 mm
EAN-13	4743254001022
UPC-12	845188004873

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

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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

T198532; Car charger

General description
This cable is used to power the infrared camera from the 12 V socket in a car.

Technical data	
Voltage	Input: 12/24 V Output: 5 V
Cable length	1 m (3.3 ft.)
Color	Black

Shipping information	
EAN-13	4743254001060
UPC-12	845188004910

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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 × W × H)	58.0 × 38.0 × 31.0 mm (2.3 × 1.5 × 1.2 in.)
Cable length	1.2 m (3.9 ft.)

Shipping information	
EAN-13	4743254001084
UPC-12	845188004934

T198529; Pouch FLIR Ex-series

General description
Pouch, including shoulder strap, for FLIR Ex-series.

Technical data	
Size (L × W × H)	270.0 × 145.0 × 115.0 mm (10.6 × 5.7 × 4.5 in.)
Color	Black

Shipping information	
• Pouch • Shoulder strap	
EAN-13	4743254001039
UPC-12	845188004880