Technical Data
FLIR E6

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	160 × 120 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)	5.2 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

http://www.flir.com

FLIR E6

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

63902-0202_en_51.xml, ver.

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 Std A <-> Micro B

Optional Software

- T198583 FLIR Tools+ (license only)

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

http://www.flir.com

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

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

http://www.flir.com

63902-0202_en_51.xml, ver.

FLIR®

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 data

Weight	60 g (2.1 oz.)
Cable length	1.8 m (5.9 ft.)
Connector	Standard USB-A to USB Micro-B

Shipping information

EAN-13	4743254001077
UPC-12	845188004927

63902-0202_en_51.xml, ver.

T198583; FLIR Tools+ (license only)

General description

Compared to FLIR Tools, FLIR Tools+ has the following features:
- Manual IR/Visual Image Grouping
- 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

Version	FLIR Tools+ 4.0
New features	--- News in 4.0: --- - Support for the new FLIR Ex and Exx series cameras. - Interactive quick start guide when connecting a FLIR camera. - Improved library view. - Support for multispectral images. - Support for auto-oriented images. - Various bug fixes.

Shipping information

- FLIR Tools+ scratchcard

System requirements

Operating system	- Windows XP, 32-bit - Windows Vista, 32-bit - Windows 7, 32-bit - Windows 7, 64-bit - Windows 8, 32-bit - Windows 8, 64-bit

Optional Software

System requirements

Software requirements	
	• Office 2007, 32-bit
	• Office 2010, 32-bit
	• Office 2013, 32-bit

v1.0

http://www.flir.com

63902-0202_en_51.xml, ver.

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

[4,27in]
108,6mm

[5,52in]
140,1mm

[3,08in]
78,3mm

[2,17in]
55,2mm

[0,53in]
13,5mm

Visual optical axis

IR optical axis

[7,41in]
188,3mm

[9,86in]
250,4mm

[1,9in]
48,3mm

[2,39in]
60,7mm

Optical axis

[2,2in]
Ø56mm

[9,59in]
243,5mm

[1,7in]
43,1mm

[3,73in]
94,8mm

Charger and Power pack

[0,84in] 21,4mm

[0,87in] 22,1mm

[0,41in] R10,5mm

[3,52in] 89,5mm

[2,6in] 66mm

[3,21in] 81,5mm

[4,13in] 105mm

[1,96in] 49,9mm

[1,41in] 35,8mm

[1,66in] 42,3mm

[2,29in] 58,3mm

[2,56in] 65mm
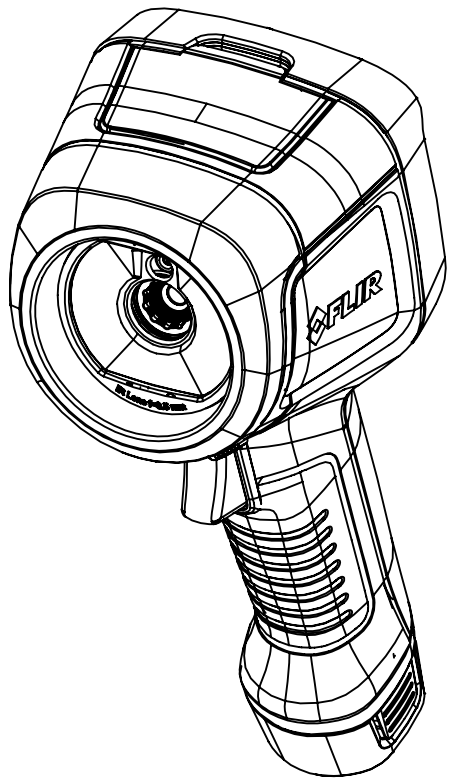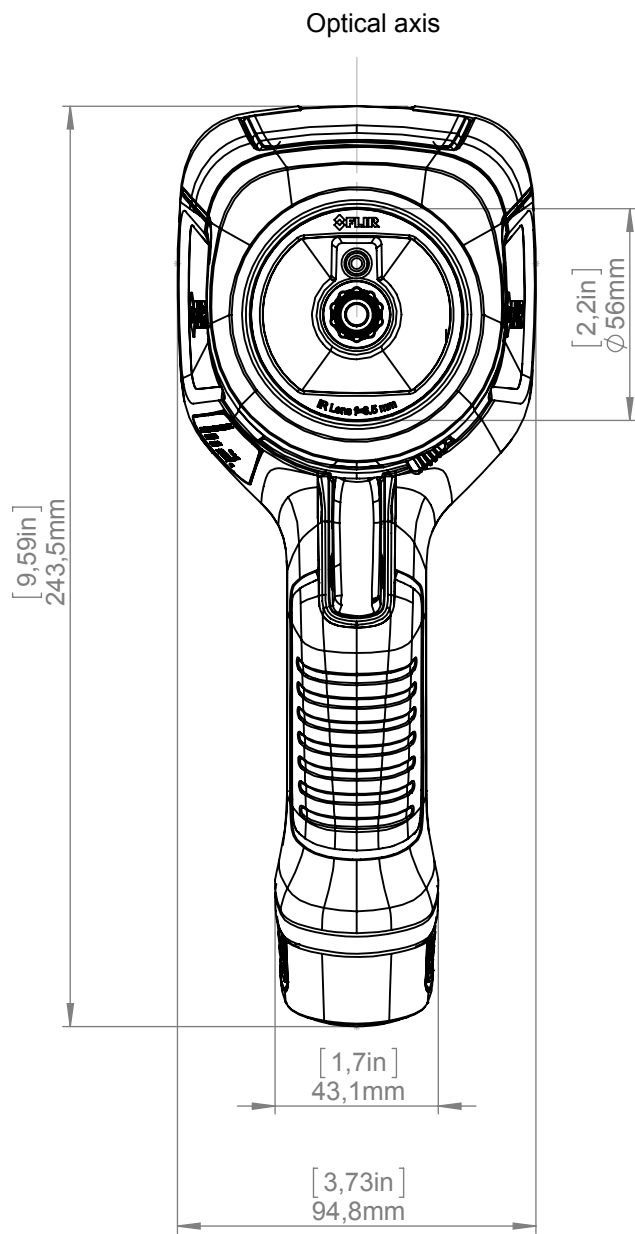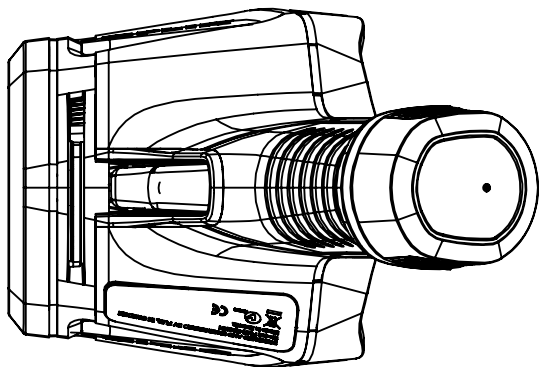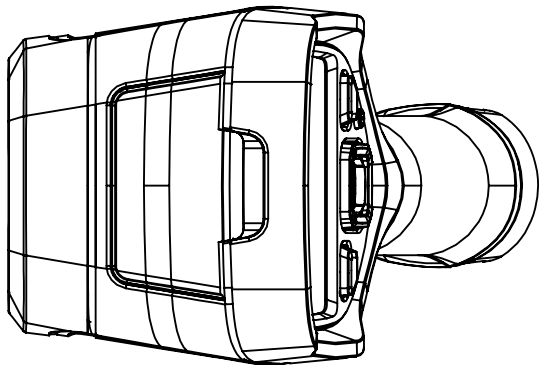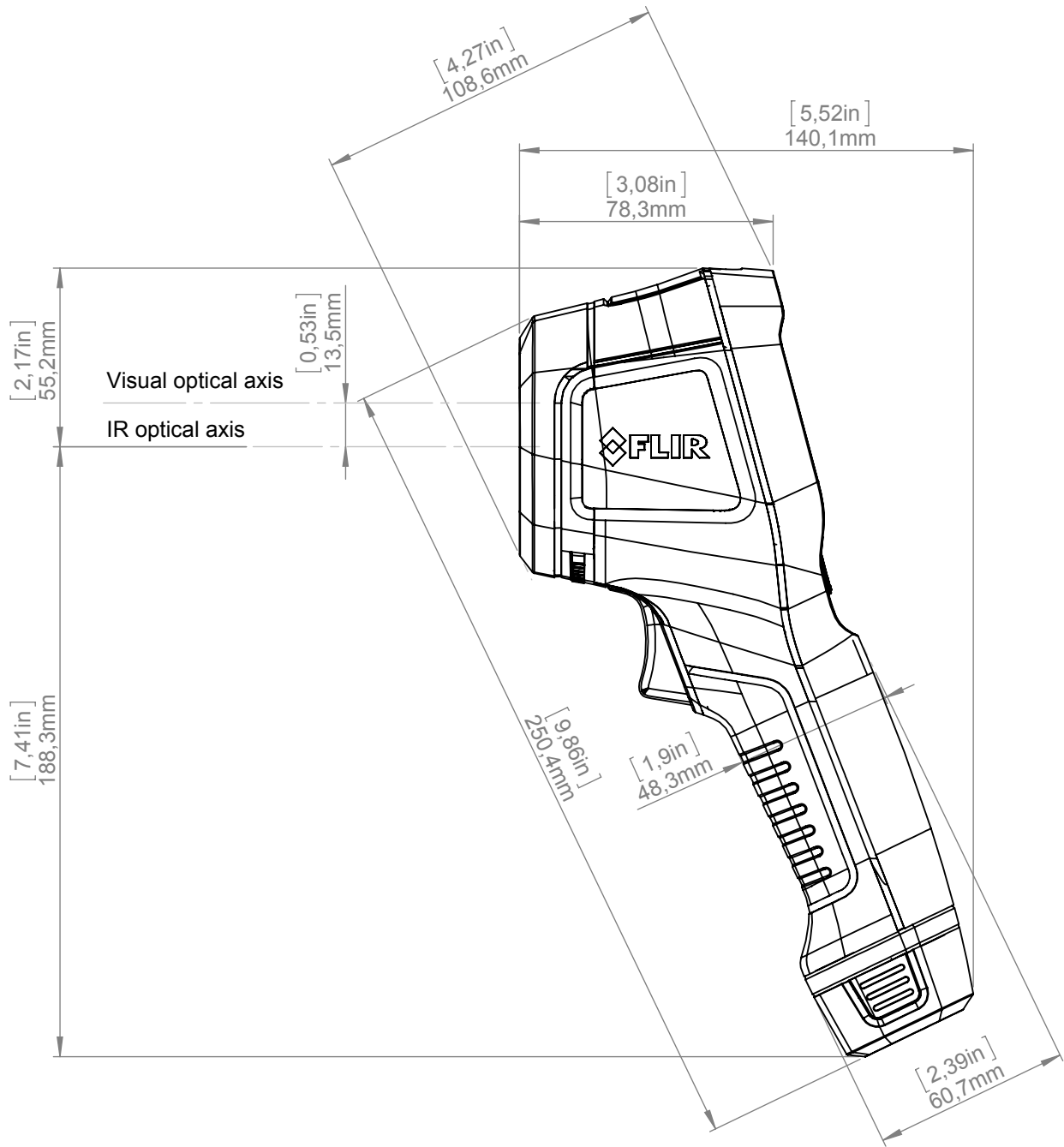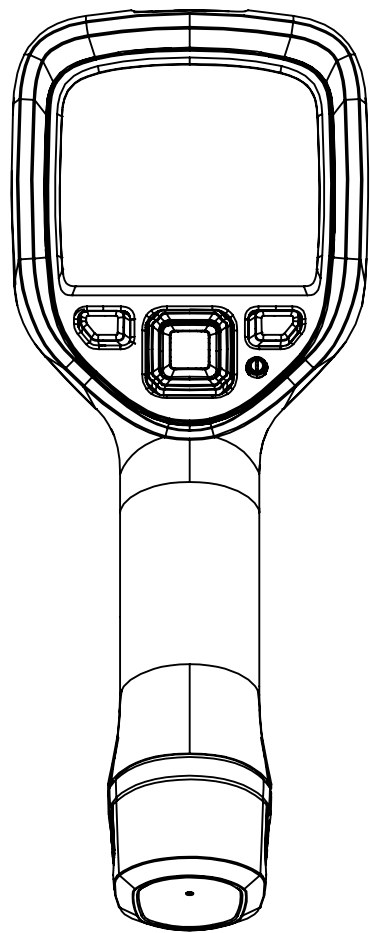
Modified	Check	Drawn by
2013-03-25	CAHA	R&D Thermography

Denomination

Basic dimensions FLIR Ex

Size A3

Scale 1:2

Sheet 2(2)

Drawing No. T127831

Size A

◆FLIR