Technical Data
FLIR i7

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Corporate Headquarters

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Website

http://www.flir.com

Customer support

http://support.flir.com

General description

The FLIR i7 is an easy-to-use point-and-shoot infrared camera that gives you access to the infrared world. The camera is an affordable replacement for an infrared thermometer, providing a thermal image with temperature information in every pixel.
The FLIR ix series cameras are light-weight, compact, and rugged, for use in harsh environments.

Benefits:

- Easy-to-use: The FLIR i7 is fully automatic and focus-free with an intuitive interface for simple measurement.
- Compact and rugged: The camera's low weight of 0.365 kg and an accessory belt pouch make it easy to bring along at all times. Its rugged design and passing a 2 m drop test ensure ease-of-use, even in harsh environments.
- Ground breaking affordability: The ix series cameras are the most affordable infrared cameras on the market.

Imaging and optical data

IR resolution	140 × 140 pixels
Thermal sensitivity/NETD	< 0.1°C (0.18°F) / 100 mK
Field of view (FOV)	29° × 29°
Minimum focus distance	0.6 m (2 ft.)
Spatial resolution (IFOV)	3.7 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	2.8 in. 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.
Isotherm	Above/below
Emissivity correction	Variable from 0.1 to 1.0
Emissivity table	Emissivity table of predefined materials

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Measurement analysis

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

Storage media	miniSD card
File formats	Standard JPEG, 14-bit measurement data included

Data communication interfaces

Interfaces	USB Mini-B: Data transfer to and from PC

Power system

Battery type	Rechargeable Li Ion battery
Battery voltage	3.6 V
Battery operating time	Approx. 5 hours at +25°C (+77°F) ambient temperature and typical use
Charging system	Battery is charged inside the camera.
Charging time	3 h to 90% capacity
Power management	Automatic shut-down
AC operation	AC adapter, 90–260 VAC input, 5 VDC output to camera

Environmental data

Operating temperature range	0°C to +50°C (+32°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 61000-6-2:2005 (Immunity) • EN 61000-6-3:2007 (Emission) • FCC 47 CFR Part 15 Class B (Emission)
Encapsulation	Camera housing and lens: IP 43 (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	0.365 kg (0.80 lb.)
Camera size (L × W × H)	223 × 79 × 85 mm (8.8 × 3.1 × 3.4 in.)
Material	Polycarbonate + acrylonitrile butadiene styrene (PC-ABS) Thixomold magnesium Thermoplastic elastomer (TPE)
Color	Black and gray

Certifications

Certification	UL, CSA, CE, PSE and CCC

Shipping information

Packaging, type	Hard case

P/N: 60101-0301

Shipping information

- Hard transport case
- Infrared camera
- Battery (inside camera)
- Calibration certificate
- Downloads brochure
- FLIR Tools software
- miniSD card, with SD card adapter
- Power supply/charger with EU, UK, US and Australian plugs
- Printed Getting Started Guide
- Printed Important Information Guide
- Service & training brochure
- USB cable
- User documentation CD-ROM
- Warranty extension card

Optional Accessories

- T910737 Memory card micro-SD with adapters
- 1910423 USB cable Std A <-> Mini-B
- T910711 Power supply/charger with EU, UK, US and AU plugs
- T197619 Hard transport case for ix
- T197410 Battery
- T911093 Tool belt
- T198483 Pouch for FLIR ix series
- T198482 Car charger

Optional Software

- T198583 FLIR Tools+ (license only)

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Optional Accessories

T910737; Memory card micro-SD with adapters

General description

Micro-SD Card for data storage (e.g. images)

Technical data

Memory card, size	At least 2 GB

Shipping information

- micro-SD
- Adapter to miniSD Card
- Adapter from miniSD Card to SD memory card

v1.03

1910423; USB cable Std A <-> Mini-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 Mini-B

v1.02

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T910711; Power supply/charger with EU, UK, US and AU plugs

General description

Combined power supply & battery charger.

Technical data

AC operation	100–240 VAC, 50/60 Hz, output 5.0 VDC, 1.2 A
Power	6 W
Size (L × W × H)	69.2 × 43.3 × 29.8 mm (2.7 × 1.7 × 1.2 in.)
Cable length	1.8 m (5.9 ft.)

Shipping information

- Power supply/Battery charger
- EU, UK, US and Australian plugs

v1.02

T197619; Hard transport case for ix

General description

Hard transport case for FLIR iX and Extech iX

Technical data

Weight	1.69 kg (3.73 lb.)
Size (L × W × H)	390 × 330 × 120 mm (15.4 × 13.0 × 4.7 in.)
Color	Black

v1.0

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T197410; 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	2.2 Ah at +20°C (+68°F)
Battery note	Approximate lithium content: 0.7 g
Charging system	Battery is charged inside the camera
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)

v1.03

T911093; Tool belt

General description

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

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![FLIR]

T198483; Pouch for FLIR ix series

General description

Pouch, including shoulder strap, for FLIR ix series.

Technical data

Weight	0.100 kg (0.22 lb.), excluding shoulder strap
Color	Black

Shipping information

- Pouch
- Shoulder strap

EAN-13	4743254000810
UPC-12	845188004521

v1.03

T198482; 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	4743254000827
UPC-12	845188004545

v1.02

Optional Software

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

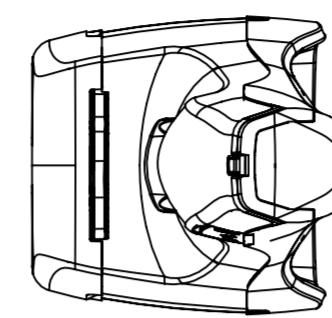http://www.flir.com

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Camera with built-in IR lens f=6,8 mm (i3 12,5°)
Camera with built-in IR lens f=6,8 mm (i5 17°)
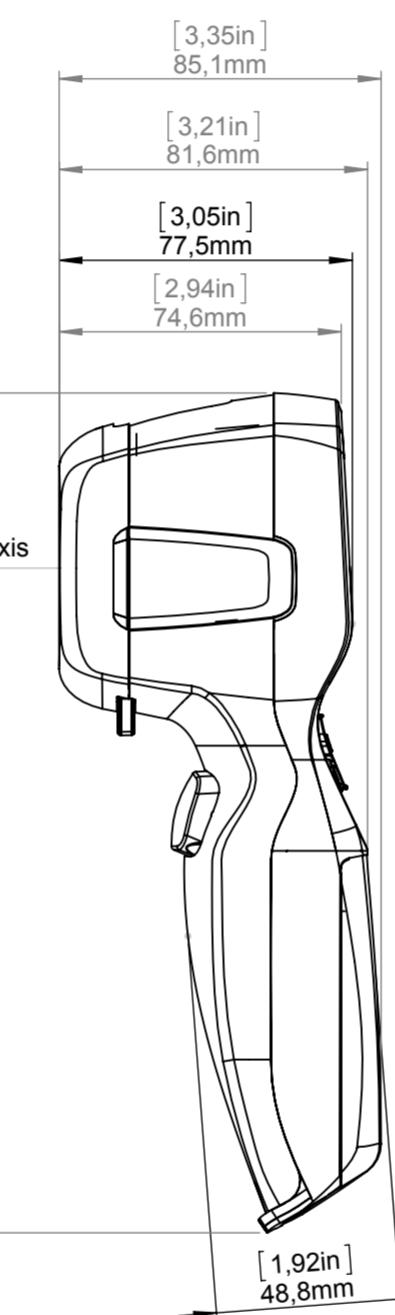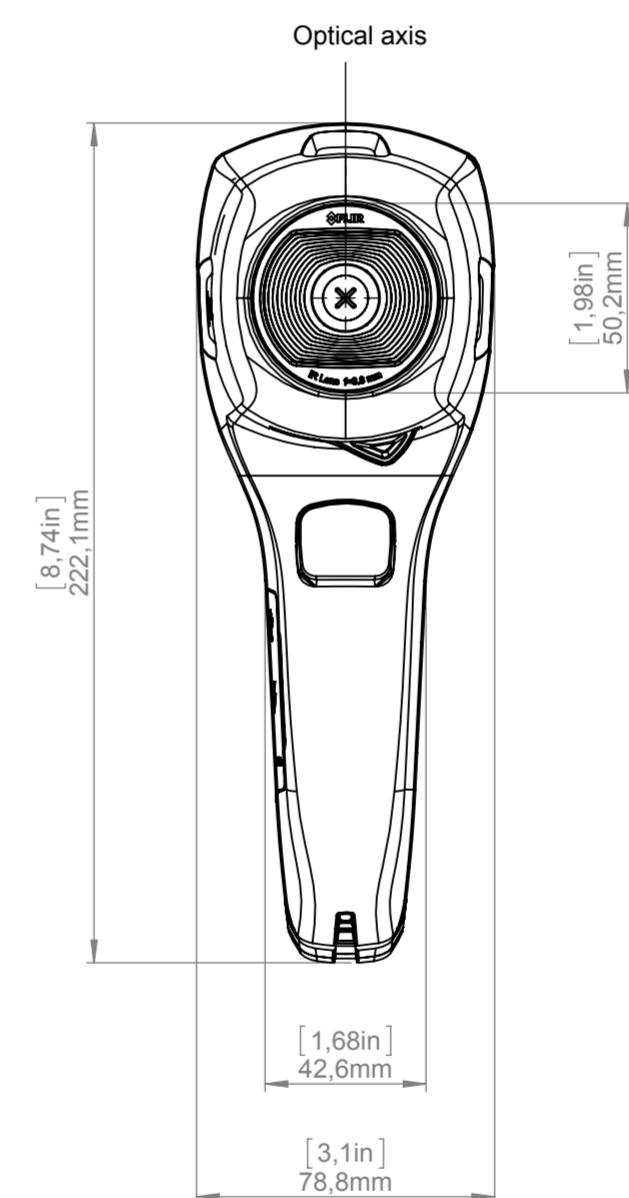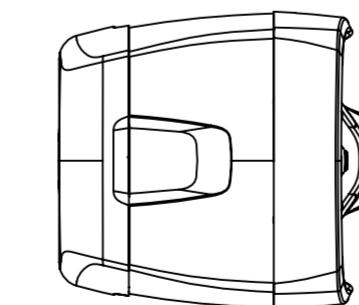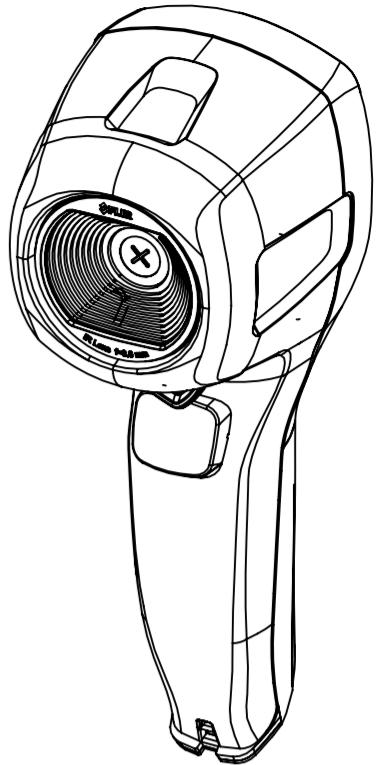**Camera with built-in IR lens f=6,8 mm (i7 25°)**

[3,35in]
85,1mm

[3,21in]
81,6mm

[3,05in]
77,5mm

[2,94in]
74,6mm

[1,82in]
46,3mm

Optical axis

[6,92in]
175,8mm

[1,92in]
48,8mm

Optical axis

[1,98in]
50,2mm

[8,74in]
222,1mm

[1,68in]
42,6mm

[3,1in]
78,8mm
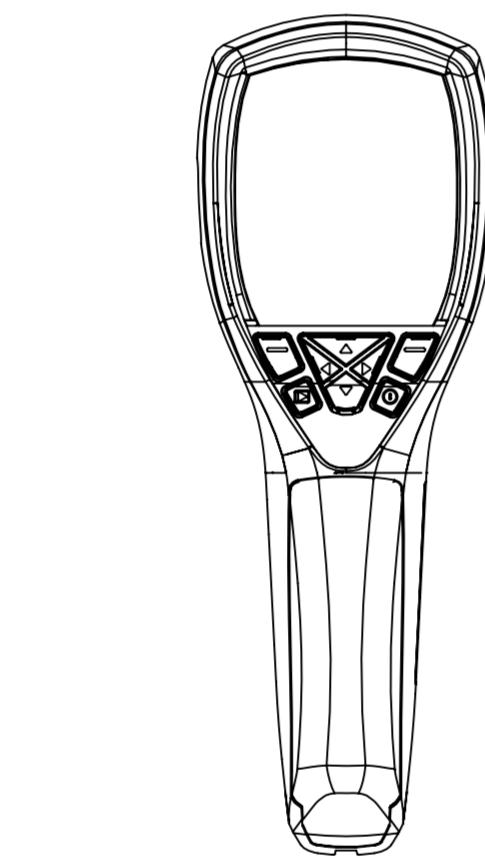
Modified	Check	Drawn by
2012-04-19	CAHA	R&D Thermography

Denomination

Basic dimensions FLIR ix

Size: A3

Scale: 1:2

Sheet: 1(1)

Drawing No.: T127628

Size: A

◆FLIR