

Technical Data

FLIR i7

Part number:

39301-0305

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February 19, 2011, 10:36 AM

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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.

Information and equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited.



General description

Affordable infrared camera with 120x120 pixel FPA with high quality image, high accuracy, area max/min, isotherm (above/below), focus free viewing, and storage on miniSD card.

Key features:

- Extremely lightweight, 0.34 kg (0.75 lb.)
- 2% high accuracy and thermal sensitivity of 0.1°C
- Area (max/min), isotherm(above/below) or centerspot measurement
- Large 2.8 in. color LCD with quality images saved on miniSD card
- Long, 5 hour battery life
- Focus free lens for quick and convenient viewing

Imaging and optical data	
Field of view (FOV)	25° × 25°
Minimum focus distance	0.6 m (2 ft.)
Spatial resolution (IFOV)	3.7 mrad
F-number	1.5
Thermal sensitivity/NETD	< 0.1°C (0.18°F) / 100 mK
Image frequency	9 Hz
Focus	Focus free
Detector data	
Detector type	Focal plane array (FPA), uncooled microbolometer
Spectral range	7.5–13 μm
IR resolution	120 × 120 pixels
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	$\pm 2^{\circ} \text{C}$ ($\pm 3.6^{\circ} \text{F}$) or $\pm 2\%$ of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F)
Measurement analysis	
Spotmeter	Center spot



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Measurement analysis	
Area	Box with max./min.
Isotherm	Above/below
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	
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)
Physical data	
Camera weight, incl. battery	0.34 kg (0.75 lb.)
Camera size (L × W × H)	223 × 79 × 83 mm (8.8 × 3.1 × 3.3 in.)
Material	Polycarbonate + acrylonitrile butadiene styrene (PC-ABS) Thixomold magnesium Thermoplastic elastomer (TPE)
Color	Blue and gray
Certifications	
Certification	UL, CSA, CE, PSE and CCC
Scope of delivery	
Packaging, type	Hard case

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Scope of delivery

- Hard transport case (including padlock)
- Infrared camera
 Battery (inside camera)
 Calibration certificate
- FLIR QuickReport CD
- Hand strap
- nand strap
 miniSD card, with SD card adapter
 Power supply/charger with EU, UK, US and Australian plugs
 Printed Getting Started Guide
 Printed Important Information Guide

- USB cable
- User documentation CD-ROM

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
- T126024 Pouch
 T197619 Hard transport case for ix
 T197410 Battery

Optional Software

- T197717 FLIR Reporter 8.5 SP2, Professional T197717L5 FLIR Reporter 8.5 SP2, Professional, 5 user licenses
- T197717L10 FLIR Reporter 8.5 SP2, Professional, 10 user licenses
- T197778 FLIR BuildIR 2.1 T197778L5 FLIR BuildIR 2.1, 5 user licenses
- T197778L10 FLIR BuildIR 2.1, 10 user licenses



Optional Accessories

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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

Scope of delivery

- 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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Optional Accessories

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



General description

Combined power supply & battery charge	er.
Technical data	
10 "	100 010 1/10 50/00 11 5 0 1/50 1 0 1

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

Scope of delivery

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

v1.02

T126024; Pouch



General description

Camera pouch for FLIR iX series with shoulder strap (1.4 m, 4.6 ft.), possible to attach to waist belt.

Technical data

recimioai data	
Weight	0.12 kg (0.26 lb.)
Size (L × W × H)	$240 \times 90 \times 75 \text{ mm } (9.4 \times 3.5 \times 3.0 \text{ in.})$
Color	Black
	v1.0

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Optional Accessories

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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

T197410; Battery



General description

High capacity battery for the IR camera.

Technical data

Battery type	Rechargeable Li Ion battery
Battery voltage	3.6 V
Battery note	Approximate lithium content: 0.7 g
Charging system	Battery is charged inside the camera
	v1.

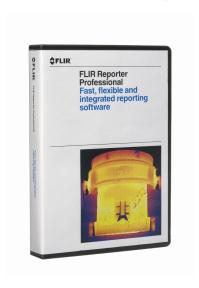
1-0305_en_41.xml, ver. 0.20



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T197717; FLIR Reporter 8.5 SP2, Professional



General description

FLIR Reporter Professional is a powerful software for creating compelling and professional, fully customized, easy-tointerpret maintenance reports.

Professional Report Wizard guides you step-by-step in combining all IR inspection data - infrared and visual images, temperature measurements, and text notes - into a professional, easy-to-interpret maintenance report.

Key features:

- Flexible report page design and layout for customized reports Use quick insert function to easily create custom report pages Fully integrated with standard Microsoft Word
- Generates reports in standard MS Office format and PDF-format
- Powerful temperature analysis
- Triple Fusion Picture-in-Picture (movable, sizable, scalable)
- Rapid report manager supporting automatic report generation by drag-and-drop
- Trending functionality
 Automatic link to Google™ Maps for images with GPS coordinates
- Automatic summary table for the report
- Fine tune images and make full temperature analysis directly in Microsoft Word Spell check
- Create your own formulas including measurement values from images
- Play radiometric sequences directly in the report
- Search functionality to quickly finding images for your report Panorama tool for combining several images to a larger image
- Support for GF series IR images
- Auto Update function
- Office 2003 (32-bit), Office 2007 (32-bit) and Office 2010 (32-bit) Windows 7 (32 and 64-bit), Windows Vista (32 and 64-bit) Support for MeterLink™ data

- *.docx compatibility

Download

http://support.flir.com/SwDownload/app/RssSWDownload.aspx?ID=93

Release notes

Version	8.5 SP2
New features	 News in SP2: Office 2010 (32 bit) Minor bug fixes News in SP1: Full support for Windows® 7 Support for MeterLink™ data *.docx compatibility

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Scope of delivery

- FLIR Reporter Professional
- Getting Starting Guide

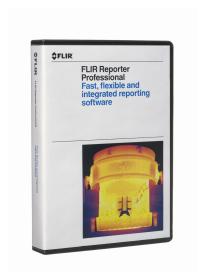
System requirements

Operating system

- Windows XP, 32-bit
- Windows Vista, 32-bit
- Windows Vista, 64-bit
- Windows 7, 32-bit
- Windows 7, 64-bit

v1.03

T197717L5; FLIR Reporter 8.5 SP2, Professional, 5 user licenses



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- Triple Fusion Picture-in-Picture (movable, sizable, scalable)
- Rapid report manager supporting automatic report generation by drag-and-drop
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- Automatic link to Google™ Maps for images with GPS coordinates Automatic summary table for the report
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- Spell check
- Create your own formulas including measurement values from images

- Play radiometric sequences directly in the report Search functionality to quickly finding images for your report Panorama tool for combining several images to a larger image
- Support for GF series IR images
- Auto Update function
- Office 2003 (32-bit), Office 2007 (32-bit) and Office 2010 (32-bit)
- Windows 7 (32 and 64-bit), Windows Vista (32 and 64-bit) Support for MeterLink™ data *.docx compatibility



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Release notes

Version	8.5 SP2
New features	 News in SP2: Office 2010 (32 bit) Minor bug fixes News in SP1: Full support for Windows® 7 Support for MeterLink™ data *.docx compatibility

Scope of delivery

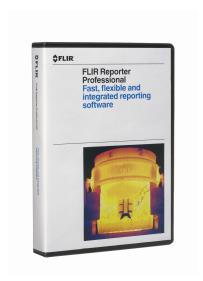
- FLIR Reporter Professional
- Getting Starting Guide
- 5 user licenses

System requirements

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

v1.02

T197717L10; FLIR Reporter 8.5 SP2, Professional, 10 user licenses



General description

FLIR Reporter Professional is a powerful software for creating compelling and professional, fully customized, easy-to-interpret maintenance reports.

Professional Report Wizard guides you step-by-step in combining all IR inspection data - infrared and visual images, temperature measurements, and text notes - into a professional, easy-to-interpret maintenance report.

Key features:

-0305_en_41.xml, ver.



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General description

- Flexible report page design and layout for customized reports Use quick insert function to easily create custom report pages
- Fully integrated with standard Microsoft Word
- Generates reports in standard MS Office format and PDF-format

- Powerful temperature analysis
 Triple Fusion Picture-in-Picture (movable, sizable, scalable)
 Rapid report manager supporting automatic report generation by drag-and-drop
- Trending functionality
- Automatic link to Google™ Maps for images with GPS coordinates
- Automatic summary table for the report
- Fine tune images and make full temperature analysis directly in Microsoft Word
- Spell check
- Create your own formulas including measurement values from images Play radiometric sequences directly in the report
- Search functionality to quickly finding images for your report
- Panorama tool for combining several images to a larger image
- Support for GF series IR images
- Auto Update function
 Office 2003 (32-bit), Office 2007 (32-bit) and Office 2010 (32-bit)
 Windows 7 (32 and 64-bit), Windows Vista (32 and 64-bit)
 Support for MeterLinkTM data

- *.docx compatibility

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Release notes

Version	8.5 SP2
New features	 News in SP2: Office 2010 (32 bit) Minor bug fixes News in SP1: Full support for Windows® 7 Support for MeterLink™ data *.docx compatibility

Scope of delivery

- FLIR Reporter Professional
- Getting Starting Guide
- 10 user licenses

System requirements

Operating system	 Windows XP, 32-bit Windows Vista, 32-bit Windows Vista, 64-bit Windows 7, 32-bit Windows 7, 64-bit
	v1 02

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T197778; FLIR BuildIR 2.1



General description

A dedicated and flexible software for advanced analyses of building related applications.

Report templates for energy loss / cost savings potential, air infiltration, moisture and insulation deficiencies. Assess scope of damage/problem.

Increase Speed & Quality of your reports.

Quantify geometrical areas and use the panorama tool to stitch images of large objects together. Makes the work considerably easier for building related analyses - Organize, Analyze, Report

Key features:

- See, Quantify and Estimate potential energy cost savings.
- Possibility of assessing scope of damage/problem
 Customized report templates for: Air infiltration, Moisture, Insulation deficiencies, and estimation of potential energy savings.
- Panorama functionality: Create automatically one image from many to cover large objects or increase resolution
- Create graph of the conditions during the inspection. Support for MeterLink™ data

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http://support.flir.com/SwDownload/app/RssSWDownload.aspx?ID=87

Release notes

Version	FLIR BuildIR 2.1
New features	Support for Windows® 7 Support for MeterLink™ data Support for fusion

Scope of delivery

FLIR BuildIR

System requirements

Operating system	Windows XP, 32-bitWindows Vista, 32-bit/64-bitWindows 7, 32-bit/64-bit
	v1.01

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T197778L5; FLIR BuildIR 2.1, 5 user licenses



General description

A dedicated and flexible software for advanced analyses of building related applications. Report templates for energy loss / cost savings potential, air infiltration, moisture and insulation deficiencies. Assess scope of damage/problem.

Increase Speed & Quality of your reports.

Quantify geometrical areas and use the panorama tool to stitch images of large objects together.

Makes the work considerably easier for building related analyses - Organize, Analyze, Report

Key features:

- See, Quantify and Estimate potential energy cost savings.
- Possibility of assessing scope of damage/problem
- Customized report templates for: Air infiltration, Moisture, Insulation deficiencies, and estimation of potential energy
- Panorama functionality: Create automatically one image from many to cover large objects or increase resolution
- Link files.
- Create graph of the conditions during the inspection. Support for MeterLink™ data

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Release notes

Version	FLIR BuildIR 2.1
New features	 Support for Windows® 7 Support for MeterLink™ data Support for fusion

Scope of delivery

- FLIR BuildIR
- 5 user licenses

System requirements

Operating system	Windows XP, 32-bitWindows Vista, 32-bit/64-bitWindows 7, 32-bit/64-bit
	v1.01

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T197778L10; FLIR BuildIR 2.1, 10 user licenses



General description

A dedicated and flexible software for advanced analyses of building related applications.

Report templates for energy loss / cost savings potential, air infiltration, moisture and insulation deficiencies. Assess scope of damage/problem.

Increase Speed & Quality of your reports.

Quantify geometrical areas and use the panorama tool to stitch images of large objects together. Makes the work considerably easier for building related analyses - Organize, Analyze, Report

Key features:

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- Link files.
- Create graph of the conditions during the inspection. Support for MeterLink™ data

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Release notes

Version	FLIR BuildIR 2.1
New features	 Support for Windows® 7 Support for MeterLink™ data Support for fusion

Scope of delivery

- FLIR BuildIR
- 10 user licenses

System requirements		
Operating system	Windows XP, 32-bitWindows Vista, 32-bit/64-bitWindows 7, 32-bit/64-bit	
		v1.01

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