FLIR Ex-Series

Easy to use, point-and-shoot thermal imaging cameras

FLIR Ex-Series cameras are point-and-shoot thermal imaging cameras that give you access to a new dimension in inspection capability. A FLIR Ex-Series camera is an affordable replacement for a spot pyrometer. It provides a thermal image with temperature information on every pixel. The combined image storage of the new MSX®, thermal and visual formats make the cameras incomparably easy to use.

Outstanding ease-of-use
The cameras are extremely easy to understand and operate, designed for entry-level users. The cameras are intuitive and come with a full manual.

Fully automatic
FLIR Ex-Series produce instant, point-and-shoot JPEG thermal imagery with all required temperature data included.

Focus free
The fixed focus-free lens makes using the FLIR Ex-Series a snap.

Compact and lightweight
FLIR Ex-Series weighs only 575g, and is easy to store in a belt pouch.

Visual camera
Visible light camera makes observing and inspecting faster and easier.

Reporting and analysis software included
FLIR Tools software is available for free download for all Ex-Series users.

Measure temperatures
Measures temperatures up to +250°C and detects temperature differences as small as 0.06°C (FLIR E6 / FLIR E8).

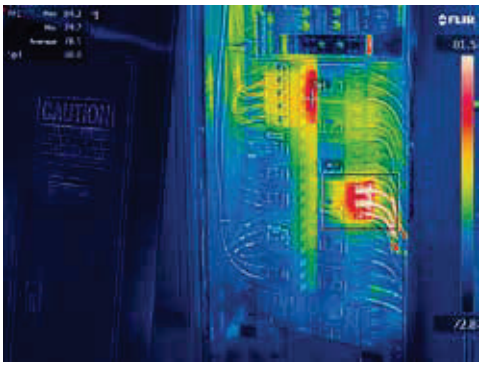
Measurement functions
Spotmeter, area with max./min., color alarm; blue below / red above set temperature.*

Picture-in-Picture (PiP)
With the PiP function it is easy to locate areas of interest.*

Multi Spectral Dynamic Imaging (MSX®)
The innovative MSX® feature produces an image more rich in every detail than ever before.

Multi Spectral Image storage
Combined image storage including MSX®, thermal, PiP and visual.

** Features dependant on camera model, please check technical specifications for more details.*



MSX® allows seeing even more detail on the thermal image.

Save time and money in 3 steps:

- Detect hidden problems, make quick damage assessments and perform preventive inspections
- Identify energy losses and poor insulation
- Spot electrical faults before it is too late
- Produce instant thermal images of your findings
- Create reports, analyse and document your findings with the easy-to-use software

FLIR Ex-Series camera model comparison

FLIR E4	FLIR E5	FLIR E6	FLIR E8
Thermal image quality: 80x60 pixels	Thermal image quality: 120x90 pixels	Thermal image quality: 160x120 pixels	Thermal image quality: 320x240 pixels
Thermal sensitivity: 0.15°C	Thermal sensitivity: 0.10°C	Thermal sensitivity: 0.06°C	Thermal sensitivity: 0.06°C
IR image, visual image, MSX®, thumbnail gallery	IR image, visual image, MSX®, picture in picture, thumbnail gallery	IR image, visual image, MSX®, picture in picture, thumbnail gallery	IR image, visual image, MSX®, picture in picture, thumbnail gallery
Center spot	Center spot, area with max./min.	Spotmeter, area with max./min., color alarm; blue below / red above set temperature	Spotmeter, area with max./min., color alarm; blue below / red above set temperature

FLIR Ex-Series

Technical specifications

** After product registration on www.flir.com*

Camera specific

	FLIR E4	FLIR E5	FLIR E6	FLIR E8
IR resolution	80 x 60 pixels	120 x 90 pixels	160 x 120 pixels	320 x 240 pixels
MSX resolution	320 x 240 pixels	320 x 240 pixels	320 x 240 pixels	320 x 240 pixels
Thermal sensitivity	0.15°C	0.10°C	0.06°C	0.06°C
Spatial resolution (IFOV)	10.3 mrad	6.9 mrad	5.2 mrad	2.6 mrad
Image modes	IR image, visual image, MSX®, thumbnail gallery	IR image, visual image, MSX®, picture in picture, thumbnail gallery	IR image, visual image, MSX®, picture in picture, thumbnail gallery	IR image, visual image, MSX®, picture in picture, thumbnail gallery
Color alarm	NA	NA	Blue below or red above set temperature	Blue below or red above set temperature

General

Imaging performance	
Field of view/min focus distance	45° x 34° / 0.5 m
Spectral range	7.5 - 13 µm
Image Frequency	9 Hz
Focus	Focus free
Focal Plane Array (FPA)	Uncooled microbolometer
Image Presentation	
Display	3" 320 x 240 color LCD
Image adjustment	Automatic adjust/lock image
Measurement	
Object temperature range	-20°C to +250°C
Accuracy	±2 °C or ±2% of reading , for ambient temperature 10°C to 35°C and object temperature above + 0°C
Measurement analysis	
Spotmeter	Center spot
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
Setup	
Color palettes	Iron, Rainbow and Black/White
Set-up commands	Local adaptation of units, language, date and time formats
Image Storage	
Image storage capacity	Internal memory store at least 500 sets of images
Image storage mode	Simultaneous storage of images in IR, visual and MSX
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	Li-Ion rechargeable
Battery voltage	3.7 V
Battery operating time	Approx. 4 hours at +25°C 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 shutdown
AC operation	AC adapter, 90-260 VAC input, 5 VDC output to camera
Environmental specifications	
Operating temperature range	-15°C to +50°C
Storage temperature range	-40°C to +70°C
Humidity	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
Bump	25 g, IEC 60068-2-29
Drop	2 m
Vibration	2 g, IEC 60068-2-6
Physical characteristics	
Dimensions	244 x 95 x 140 mm
Weight	575 g, including battery
Shipping size	303 x 206 x 128 mm
Shipping weight	2.7 kg (FLIR E8: 2.95 kg)
Standard package	
FLIR thermal imaging camera, hard transport case, FLIR Tools™ download card, user documentation CD-ROM, printed documentation, battery (2x), power supply/charger with EU, UK, US and Australian plugs, USB cable, battery charger (FLIR E8 only)	

FLIR Ex-Series

Accessories

Power

Car charger [T198532]
This cable is used to power the thermal imaging camera from the 12 V socket in a car.

Battery [T198530]
Extra battery that will allow you to spend extra time in the field doing inspections.

Power supply incl. Multi-plugs [T198534]
This power supply is used when powering the camera from the mains supply or to charge the batteries. It comes with different types of plugs.

Accessories

Hard transport case [T198528]
Rugged, watertight plastic shipping case. Holds all items securely. The case can be locked with padlocks and features a breather valve to prevent pressure build-up in airplane cargo holds.

Pouch [T198529]
Soft pouch to protect the camera. Including shoulder strap.

Tool belt [T911093]
Tool belt for thermal imaging camera pouches.

USB cable Std-A <-> Micro-B [T198533]
USB cable to connect the camera.

FLIR Exx-Series

Accessories

Power

Cigarette lighter adaptor kit, 12 V DC, 1.2 m [1910490]
Can be used to power the camera from the cigarette lighter socket in a car.

Battery [T197752]
High capacity battery for the camera.

Battery charger [T198125]
Stand-alone 2-bay battery charger, including power supply with multi plugs.

Power supply incl. Multi-plugs [T910814]
This power supply is used when powering the camera from the mains supply or to charge the batteries. It comes with different types of plugs.