

FLIR E-Series Specifications



	E40	E50	E60
Imaging and optical data			
Field of view (FOV)/Minimum focus distance	25°×19°/0.4m (1.31ft.)	25°×19°/0.4m (1.31ft.)	25°×19°/0.4m (1.31ft.)
Spatial resolution (IFOV)	2.72mrad	1.82mrad	1.36mrad
Thermal sensitivity/NETD	<0.07°C@+30°C(+86°F)/70mK	<0.05°C@+30°C(+86°F)/50mK	<0.05°C@+30°C(+86°F)/50mK
Image frequency	60Hz	60Hz	60Hz
Focus	Manual	Manual	Manual
Zoom	1–2× continuous, digital zoom, including panning	1–4× continuous, digital zoom, including panning	1–4× continuous, digital zoom, including panning
Focal Plane Array (FPA)/Spectral range	Uncooled microbolometer/7.5–13µm	Uncooled microbolometer/7.5–13µm	Uncooled microbolometer/7.5–13µm
IR resolution	160×120 pixels	240×180 pixels	320×240 pixels
Image presentation			
Display	Touchscreen, 3.5in. LCD, 320×240 pixels	Touchscreen, 3.5in. LCD, 320×240 pixels	Touchscreen, 3.5in. LCD, 320×240 pixels
Image modes	IR image, visual image, PiP, thumbnail gallery	IR image, visual image, PiP, thumbnail gallery	IR image, visual image, PiP, thumbnail gallery
Thermal fusion	IR image, below or with temp interval on visual	IR image, below or with temp interval on visual	IR image, below or with temp interval on visual
Picture in Picture	IR area on visual image	Scalable IR area on visual image	Scalable IR area on visual image
Measurement			
Object temperature range	–20°C to +120°C (–4°F to +248°F) 0°C to +650°C (+32°F to +1202°F)	–20°C to +120°C (–4°F to +248°F) 0°C to +650°C (+32°F to +1202°F)	–20°C to +120°C (–4°F to +248°F) 0°C to +650°C (+32°F to +1202°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading	±2°C (±3.6°F) or ±2% of reading	±2°C (±3.6°F) or ±2% of reading
Measurement analysis			
Spotmeter	3	3	3
Area	3 boxes with max./min./average	3 boxes with max./min./average	3 boxes with max./min./average
Automatic hot/cold detection	Auto hot or cold spotmeter markers within area	Auto hot or cold spotmeter markers within area	Auto hot or cold spotmeter markers within area
Isotherm	Detect high/low temperature/interval	Detect high/low temperature/interval	Detect high/low temperature/interval
Difference temperature	Delta temp between measurement functions	Delta temp between measurement functions	Delta temp between measurement functions
Emissivity correction	Variable from 0.01 to 1.0	Variable from 0.01 to 1.0	Variable from 0.01 to 1.0
External optics/windows correction	Automatic, based on inputs of optics	Automatic, based on inputs of optics	Automatic, based on inputs of optics
Measurement corrections	Reflected temperature, optics/atmospheric trans	Reflected temperature, optics/atmospheric trans	Reflected temperature, optics/atmospheric trans
Set-up			
Color palettes	Arctic, Gray, Iron, Lava, Rainbow and Rainbow HC	Arctic, Gray, Iron, Lava, Rainbow and Rainbow HC	Arctic, Gray, Iron, Lava, Rainbow and Rainbow HC
Set-up commands	Adaptation of units, language/date/time formats	Adaptation of units, language/date/time formats	Adaptation of units, language/date/time formats
Languages	21	21	21
Storage of images			
Image storage	Standard JPEG, including measurement data	Standard JPEG, including measurement data	Standard JPEG, including measurement data
Image storage mode	Simultaneous storage of IR and visual images	Simultaneous storage of IR and visual images	Simultaneous storage of IR and visual images
Digital camera			
Built-in digital camera	3.1 Mpixel (2048×1536 pixels), and one LED light	3.1 Mpixel (2048×1536 pixels), and one LED light	3.1 Mpixel (2048×1536 pixels), and one LED light
Built-in digital lens data	FOV 53°×41°	FOV 53°×41°	FOV 53°×41°
Data communication interfaces			
Interfaces	USB-mini, USB-A, composite video	USB-mini, USB-A, composite video	USB-mini, USB-A, composite video
USB	•USB-A: Connect external USB device •USB Mini-B: To and from PC/streaming MPEG-4	•USB-A: Connect external USB device •USB Mini-B: To and from PC/streaming MPEG-4	•USB-A: Connect external USB device •USB Mini-B: To and from PC/streaming MPEG-4
Video out	Composite	Composite	Composite
Power system			
Battery	Li Ion, 4 hours operating time	Li Ion, 4 hours operating time	Li Ion, 4 hours operating time
Charging system	In camera (AC adapter or 12V from a vehicle)	In camera (AC adapter or 12V from a vehicle)	In camera (AC adapter or 12V from a vehicle)
Power management	Automatic shutdown and sleep mode	Automatic shutdown and sleep mode	Automatic shutdown and sleep mode
Environmental data			
Operating temperature range	–15°C to +50°C (+5°F to +122°F)	–15°C to +50°C (+5°F to +122°F)	–15°C to +50°C (+5°F to +122°F)
Storage temperature range	–40°C to +70°C (–40°F to +158°F)	–40°C to +70°C (–40°F to +158°F)	–40°C to +70°C (–40°F to +158°F)
Humidity (operating and storage)	+25°C to +40°C (+77°F to +104°F)/2 cycles	+25°C to +40°C (+77°F to +104°F)/2 cycles	+25°C to +40°C (+77°F to +104°F)/2 cycles
Encapsulation	IP54 (IEC 60529)	IP54 (IEC 60529)	IP54 (IEC 60529)
Bump	25g (IEC 60068-2-29)	25g (IEC 60068-2-29)	25g (IEC 60068-2-29)
Vibration	2g (IEC 60068-2-6)	2g (IEC 60068-2-6)	2g (IEC 60068-2-6)
Physical data			
Camera weight, incl. battery	0.825kg (1.82lb.)	0.825kg (1.82lb.)	0.825kg (1.82lb.)
Camera size (L×W×H)	246×97×184mm (9.7×3.8×7.2in.)	246×97×184mm (9.7×3.8×7.2in.)	246×97×184mm (9.7×3.8×7.2in.)
Tripod mounting	UNC ¼"–20 (adapter needed)	UNC ¼"–20 (adapter needed)	UNC ¼"–20 (adapter needed)
Optional lens			
	•IR lens f=30mm, 15° incl. case, •IR lens f=10mm, 45° incl. case	•IR lens f=30mm, 15° incl. case, •IR lens f=10mm, 45° incl. case	•IR lens f=30mm, 15° incl. case, •IR lens f=10mm, 45° incl. case

Leadership has a class of its own



CE IP54 2 YEAR WARRANTY
Warranty extended to 2 years when the camera is registered

FLIR E-Series Thermal Imaging Cameras for Electrical & Industrial

- ◆ Groundbreaking Performance & Affordability
- ◆ Superior Point & Shoot Thermal Imagery
- ◆ Built-in Digital Camera & Laser Pointer
- ◆ Large Bright Touch-Screen

www.flir.com/thg/e-Series



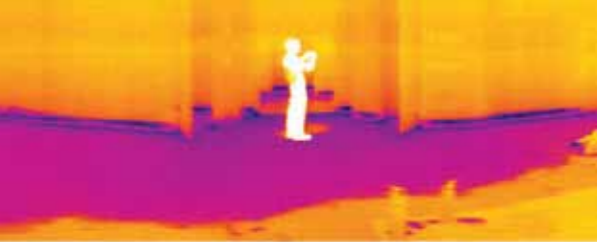
Disclaimer: Images herein are for illustrative purposes only. Specifications are subject to change without notice. Availability of camera models and accessories subject to regional market considerations.

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Training
 The center offers a wide variety of infrared courses - from entry level thermography to advanced IR training. ITC infrared thermography certifications are globally recognized and are designed to exceed the requirements of international certification standards. Check the ITC course schedule in the Asia Pacific region: www.flir.com/thg/itc

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Optional Software Packages

FLIR Reporter Professional is a powerful software for creating compelling and professional, fully customized, easy-to-interpret reports in a standard MS Word document. You can create a report by simply dragging and dropping your images on a desktop icon or using the Wizards to guide you step-by-step through the process. The saved document is a 'live' report with full access to the analysis tools and temperature measurement data. The reports can be multi-page and include all of your IR inspection data-infrared and visual images, temperature measurements, voice comments and text notes.

FLIR BuildIR Software package specifically designed to carry out advanced analysis of building structures. It is used to analyze images taken with an infrared camera and create inspection reports based on these images.

Panorama Function allows you to conveniently piece together normal sized images to create one large image for a wide angle view of the area being measured by using **FLIR BuildIR** or **Reporter** software package.

From FLIR comes a new generation of compact 'point & shoot' E-Series thermal imaging cameras designed to set new standards for excellence and value in ergonomic handheld imagers.

There are three models in the E-Series range to suit a wide range of applications in the electrical and industrial inspection fields.

Take your pick of three pixel resolutions – all with 60Hz frame rate and a 3.0 Meg visual camera built in.

FLIR E Series package includes:

- Hard transport case
- Infrared camera with lens
- Calibration certificate, Battery
- Video cable, Camera lens cap
- FLIR Tools software CD-ROM FREE!
- Handstrap, Memory card
- Power supply, incl. multi-plugs
- Getting Started, Information Guide
- USB cable, User documentation CD-ROM
- Warranty extension, Registration card



Differential temperature

Spot LED light for dark corners

Thumbnail JPEG image gallery

Fast tools at your Fingertips!

It's all at your fingertips – the easy to use menu interface, the ergonomic grip and lightweight makes the FLIR E-Series a real pleasure to hold – all day long if you have to.

But don't let its good looks fool you. This thermal imager is made for the toughest of working conditions and if you happen to drop it, dust it off and it will go on without missing a beat.

It has passed all sorts of tests with flying colours – even shock and vibration testing.



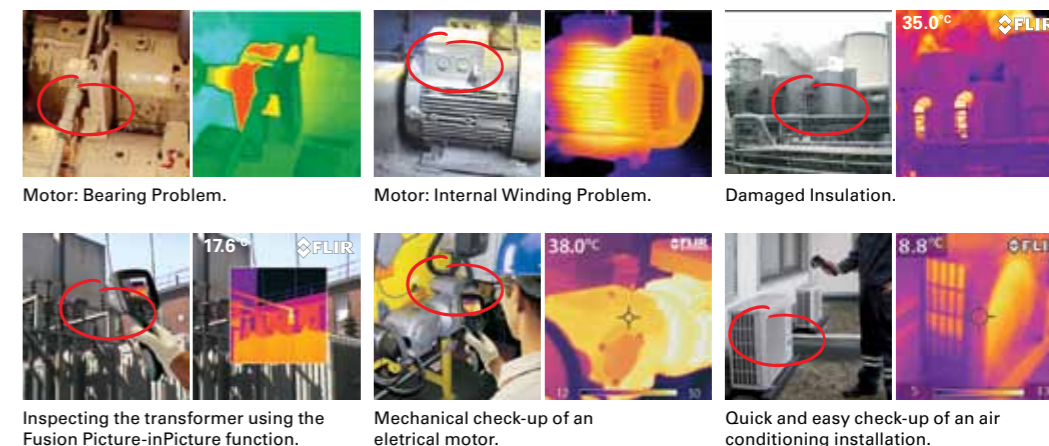
[PiP]

Picture-in-Picture FLIR invented it

Create an infrared overlay on your visual image – moveable and scalable. Allows for easier identification and interpretation of infrared images. This advanced technology enhances the value of an infrared image by allowing you to overlay it directly over the corresponding visible image. This functionality combines the benefits of both the infrared image and visual picture at the push of a button.



Perfect for electrical & industrial applications



Motor: Bearing Problem.

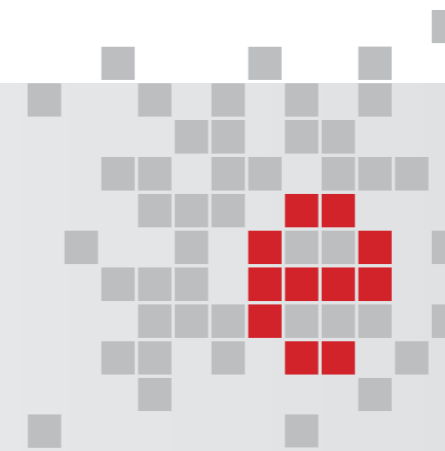
Motor: Internal Winding Problem.

Damaged Insulation.

Inspecting the transformer using the Fusion Picture-inPicture function.

Mechanical check-up of an electrical motor.

Quick and easy check-up of an air conditioning installation.



Pixel Perfect!

Every thermal image from the range-topping FLIR E60 model is measured in 76,800 pixels. FLIR imagers zero-in on hotspots with a temperature range from -20° to 650°C. The best a spotmeter can give you is an average reading and no hotspots. The FLIR E60 gives you 76,800 individual spotmeter readings at the same time!



FLIR E40 19,200 pixels
160x120 IR resolution.

FLIR E50 43,200 pixels
240x180 IR resolution. Superior accuracy & sensitivity

FLIR E60 76,800 pixels
320x240 IR resolution. Best point & shoot thermal resolution