FLIR E60

For electrical/industrial applications

E-Series InfraRed Camera (320 x240 IR Resolution)

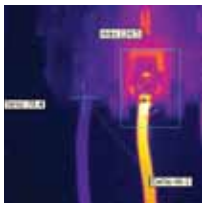
With on board Visual Camera, Picture-in-Picture, Thermal Fusion and Bright LED Light

- 0.05°C @ 30°C Thermal Sensitivity
- Bright LED Light
- Annotate Images with Voice
- Picture-in-Picture (Scalable)
- Thermal Fusion
- 3.5" Touch-Screen LCD Display
- 4X Continuous Zoom
- Area Min/Max with Auto Hot/Cold Spot Marker
- Delta T - Differential Temperature

Thermal Fusion

Built-in Laser Pointer

Built-in Illuminator Light



Differential Temperature

FLIR E60 Features

- **High Resolution IR Images** - 76,800 pixels (320 x 240) Infrared resolution
- **Visible Light Digital Camera** - 3MP resolution with flash provides sharp images regardless of lighting conditions
- **Thermal Fusion** - Blending of thermal and digital images in real-time
- **Scalable Picture in Picture (PIP)** - Displays thermal image super-imposed over a digital image and is scalable to resize the thermal image
- **Bright LED Light** - Allows the visual camera and fusion to be used in poorly lit environments
- **Wide Temperature Range** - From -20˚ to +650˚C targeting electrical and industrial applications
- **± 2% Accuracy** - reliable temperature measurement
- **Thumbnail Image Gallery** - Allows quick search of stored images
- **Li-Ion Rechargable Battery** - lasts >5hrs continuous use; replaceable
- **Copy to USB** - Easy upload of images from camera to USB memory stick
- **Laser LocatIR™ Pointer** - Pinpoints a reference spot with a laser
- **Laser Marker** - Marks the point on the IR displayed image as to where the Laser pointer is targeting
- **IR Window Correction** - Software settings allow you to account for transmission loss through IR windows
- **Area (Min/Max) Mode** - Shows the Minumum or the Maximum Temperature reading within the selected area
- **Auto Hot/Cold Spot Marker** - Marks the area that automatically finds the hottest or coldest spot within the box
- **Voice Comment Recording and Text** - on images & can be integrated onto report
- **Wireless Communication** - Bluetooth® transmitter with METERLiNK™
- **Includes** - Hard transport case, Infrared camera with lens, Battery, Calibration certificate, Camera lens cap, FLIR Tools software CD-ROM Handstrap, Memory card, Power supply, incl. multi-plugs Printed Getting Started Guide Printed Important Information Guide, USB cable, User documentation CD-ROM, Video cable, Warranty extension card or Registration card

IP54 Splashproof Dustproof

2 YEARS WARRANTY

METERLiNK Bluetooth

Warranty extended to 2 years when the camera is registered

Applications

Electrical: Hot Fuses

Motor: Internal Winding Problem

Motor: Bearing Problem

FLIR E60 Specifications

Imaging and optical data	
Field of view (FOV) / Minimum focus distance	25° × 19° / 0.4 m (1.31 ft.)
Spatial resolution (IFOV)	1.36 mrad
Thermal sensitivity / NETD	<0.05°C @ +30°C (+86°F) / 50 mK
Image frequency	60 Hz
Focus	Manual
Zoom	1–4× continuous, digital zoom, including panning
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 µm
IR resolution	320 × 240 pixels
Image presentation	
Display	Touch screen, 3.5 in. LCD, 320 × 240 pixels
Image modes	IR image, visual image, thermal fusion, picture in picture, thumbnail gallery
Thermal fusion	IR image shown above, below or within temp interval on visual image
Picture in Picture	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)
Accuracy	±2°C (±3.6°F) or ±2% of reading
Measurement analysis	
Spotmeter	3
Area	3 boxes with max./min./average
Automatic hot/cold detection	Auto hot or cold spot meter markers within area
Isotherm	Detect high/low temperature/interval
Difference temperature	Delta temperature between measurement functions or reference temperature
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
External optics/windows correction	Automatic, based on inputs of optics/window transmission and temperature
Measurement corrections	Reflected temperature, optics transmission and atmospheric transmission
Set-up	
Color palettes	Arctic, Gray, Iron, Lava, Rainbow and Rainbow HC
Set-up commands	Local adaptation of units, language, date and time formats
Languages	21
Storage of images	
Image storage	Standard JPEG, including measurement data, on memory card
Image storage mode	IR/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
Built-in digital lens data	FOV 53° × 41°
Data communication interfaces	
Interfaces	USB-mini, USB-A, Bluetooth, Wi-Fi, composite video
Bluetooth	Communication with cellphone, PC, headset and external sensors
USB	•USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC / streaming MPEG-4
Video out	Composite
Power system	
Battery	Li Ion, 4 hours operating time
Charging system	In camera (AC adapter or 12V from a vehicle) or 2-bay charger
Power management	Automatic shutdown and sleep mode (user selectable)
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 +25°C to +40°C (+77°F to +104°F) / 2 cycles
Encapsulation	IP54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Physical data	
Camera weight, incl. battery	0.825 kg (1.82 lb.)
Camera size (L × W × H)	246 × 97 × 184 mm (9.7 × 3.8 × 7.2 in.)
Tripod mounting	UNC ¼"-20 (adapter needed)
Optional lens and connecting meters:	
IR lens f=30 mm, 15° incl. case IR lens f=10 mm, 45° incl. case	•EX845: Clamp meter + IR therm TRMS 1000 AAC/DC •MO297: Moisture meter, pinless with memory

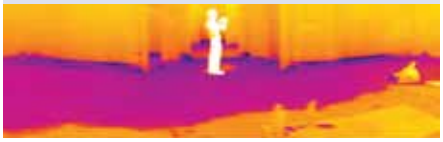
METER LiNK Bluetooth

METERLiNK frees the Thermographer from the manual process of collecting field data

Infrared cameras quickly locate problems with electrical equipment

Collecting current measurements and associating them with the right component identified on an infrared image, can be a complicated and cumbersome process

Manual data collection results in unnecessary complexity and risk. METERLiNK eliminates this problem by allowing the thermographer to quickly take a current reading on an electrical target and associate those readings with the corresponding targets stored in an infrared image



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.

Softwares for Research & Development Infrared cameras are sucessfully used in R&D applications to speed up and verify the design process, as well as enabling fast, non-invasive and precise detection of deficiencies. With **FLIR QuickPlot** and/or **FLIR ResearchIR**, the benefits and use of an infrared camera can be further extended and allow more in-depth analayses to be made.

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.

FLIR®

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