Technical Data
FLIR E40

Imaging and optical data

Field of view (FOV) / Minimum focus distance	25° × 19° / 0.4 m (1.31 ft.)
Spatial resolution (IFOV)	2.72 mrad
Thermal sensitivity/NETD	< 0.07°C @ +30°C (+86°F) / 70 mK
Image frequency	60 Hz
Focus	Manual
Zoom	1–2× continuous, digital zoom, including panning
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 µm
IR resolution	160 × 120 pixels

Image presentation

Display	Touch screen, 3.5 in. LCD, 320 × 240 pixels
Image modes	IR image, visual image, picture in picture, thumbnail gallery
Picture in Picture	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 spotmeter 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

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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

Image annotations

Text	Text from predefined list or soft keyboard on touch screen
Report generation	• Separate PC software with extensive report generation

Video recording in camera and streaming to PC

Radiometric IR-video streaming	Full dynamic to PC using USB
Non-radiometric IR-video streaming	MPEG-4 to PC using USB

Digital camera

Built-in digital camera	3.1 Mpixel (2048 × 1536 pixels), and one LED light
Built-in digital lens data	FOV 53° × 41°

Laser pointer

Laser	Activated by dedicated button
Laser alignment	Position is automatic displayed on the IR image

Data communication interfaces

Interfaces	USB-mini, USB-A, composite video
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 12 V 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	IP 54 (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)

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Scope of delivery

- 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

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