Technical Data
FLIR E50 (incl. Wi-Fi)

Part number:

64501-0201

Copyright

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Customer support

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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.

Imaging and optical data

IR resolution	240 × 180 pixels
MSX resolution	320 x 240 pixels
Thermal sensitivity/NETD	< 0.05°C @ +30°C (+86°F) / 50 mK
Field of view (FOV) / Minimum focus distance	25° × 19° / 0.4 m (1.31 ft.)
Spatial resolution (IFOV)	1.82 mrad
Image frequency	60 Hz
Focus	Manual
Zoom	2× and 4× digital zoom, including panning
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 µm

Image presentation

Display	Touch screen, 3.5 in. LCD, 320 × 240 pixels
Auto orientation	Automatic landscape or portrait
Image modes	IR image, visual image, MSX, picture in picture, thumbnail gallery
Multi Spectral Dynamic Imaging (MSX)	IR image with enhanced detail presentation
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, for ambient temperature 10°C to 35°C (+50°F to 95°F)

Measurement analysis

Spotmeter	3
Area	3 boxes with max./min./average
Automatic hot/cold detection	Auto hot or cold spotmeter markers within area
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

Alarm

Color alarm	Red above, Blue below and Yellow interval

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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	Simultaneous storage of images in IR, visual and MSX

Image annotations

Voice	60 seconds (via Bluetooth)
Text	Text from predefined list or soft keyboard on touch screen
Meterlink	Wireless connection (Bluetooth®) to: FLIR meters with MeterLink
Report generation	• Flir Tools software specifically designed to provide an easy way to create inspection reports. It is available on the major platforms – Android, Windows, MacOS and iOS.

Video recording in camera

Non-radiometric IR-video recording	MPEG-4 to memory card

Video streaming

Radiometric IR-video streaming	Full dynamic to PC using USB
Non-radiometric IR-video streaming	Uncompressed colorized video 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, Bluetooth, Wi-Fi, composite video
Bluetooth	Communication with headset and external sensors
Wi-Fi	Peer to peer (adhoc) or infrastructure (network)
USB	• USB-A: Connect external USB device • USB Mini-B: Data transfer to and from PC / Uncompressed colorized video
Video out	Composite

Radio

Wi-Fi	Standard: 802.11 b/g Frequency range: 2412–2462 MHz Max output power: 15 dBm
Bluetooth	Frequency range: 2402–2480 MHz
Antenna	Internal

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
Charging temperature	0°C to +45°C (+32°F to +113°F)
Power management	Automatic shutdown and sleep mode (user selectable)

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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
EMC	• ETSI EN 301 489-1 (radio) • ETSI EN 301 489-17 • EN 61000-6-2 (Immunity) • EN 61000-6-3 (Emission) • FCC 47 CFR Part 15 B (Emission) • ICES-003
Radio spectrum	• ETSI EN 300 328 • FCC Part 15.247 • RSS-210
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Drop	2 m (6.6 ft.)
Safety	EN/UL/CSA/PSE 60950-1

Physical data

Camera weight, incl. battery	0.880 kg (1.94 lb.)
Camera size (L × W × H)	246 × 97 × 184 mm (9.7 × 3.8 × 7.2 in.)
Tripod mounting	UNC ¼"-20 (adapter needed)

Shipping information

- Hard transport case
- Infrared camera with lens
- Battery
- FLIR Tools software
- Handstrap
- Memory card
- Power supply, incl. multi-plugs
- Printed documentation
- USB cable
- User documentation CD-ROM
- Video cable

Packaging, weight	4.7 kg (10.36 lb.)
Packaging, size	500 × 350 × 190 mm (19.7 × 13.8 × 7.5 in.)
EAN-13	4743254001145
UPC-12	845188005177

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