

Technical Data FLIR E50 (incl. Wi-Fi)

Part number:

49001-2101

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Corporate Headquarters

FLIR Systems, Inc. 27700 SW Parkway Ave. Wilsonville, OR 97070 Telephone: +1-503-498-3547

Website

http://www.flir.com

Customer support

http://support.flir.com

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

imaging and optical data	
IR resolution	240 × 180 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	1-4x continuous, 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
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	$\pm 2^{\circ} C$ ($\pm 3.6^{\circ} F)$ or $\pm 2\%$ 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
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



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Set-up	
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
Image annotations	
Voice	60 seconds (via Bluetooth)
Text	Text from predefined list or soft keyboard on touch screen
Meterlink	Wireless connection (Bluetooth®) to: Extech Moisture Meter MO297 Extech Clamp Meter EX845
Report generation	Separate PC software with extensive report generation
Video recording in camera Non-radiometric IR-video recording	MPEG-4 to memory card
Two readones in video recording	Wi Ed 4 to monory 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 \times 1536 pixels), and one LED light
Built-in digital lens data	FOV 53° × 41°
Locar painter	
Laser pointer Laser	Activated by dedicated button
Laser alignment	Position is automatic displayed on the IR image
Data communication interfaces Interfaces	LICE mini LICE A Physicath Wi Fi composite video
Bluetooth	USB-mini, USB-A, Bluetooth, Wi-Fi, composite video Communication with headset and external sensors
Wi-Fi	
USB	USB-A: Connect external USB device USB Mini-B: Data transfer to and from PC / Uncom-
Video out	pressed colorized video Composite
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 lon, 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)
Environmental data	
Operating temperature range	-15°C to +50°C (+5°F to +122°F)



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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 328FCC Part 15.247RSS-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	0.825 kg (1.82 lb.)
Camera size (L × W × H)	246 × 97 × 184 mm (9.7 × 3.8 × 7.2 in.)
Tripod mounting	UNC 1/4"-20 (adapter needed)

Shipping information

- Hard transport case Infrared camera with lens
- Battery
 Calibration certificate
- Camera lens cap
 Downloads brochure
 FLIR Tools software CD-ROM
- Handstrap

- Memory card
 Memory card
 Power supply, incl. multi-plugs
 Printed Getting Started Guide
 Printed Important Information Guide
 Service & training brochure
- USB cable
- User documentation CD-ROM Video cable
- Warranty extension card



















