Technical Data
FLIR i50

Imaging and optical data

Field of view (FOV) / Minimum focus distance	25° × 25° / 0.10 m (0.33 ft.)
Spatial resolution (IFOV)	3.12 mrad
Thermal sensitivity/NETD	<0.10°C (<0.18°F) @ +25°C (+77°F) / 100 mK
Image frequency	9 Hz
Focus	Manual
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 µm
IR resolution	140 × 140 pixels

Image presentation

Display	Built-in 3.5 in. LCD, 256k colors, 240 × 320 pixels
Image modes	IR image, visual image, Picture in Picture, thumbnail gallery
Picture in Picture	IR area (in three steps) on visual image

Measurement

Object temperature range	−20 to +120°C (−4 to +248°F) 0 to 350°C (32 to +662°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading

Measurement analysis

Spotmeter	Center spot
Area	1 box with min./max.
Emissivity correction	Variable from 0.1 to 1.0 or selected from list of materials
Reflected apparent temperature correction	Automatic, based on input of reflected temperature
IR window auto-correction	Automatic, based on inputs of optics/window transmission and temperature

Set-up

Menu commands	Palettes (Black and White, Iron and Rainbow), image adjustment (auto/manual)
Set-up commands	Local adaptation of units, language, date and time formats; automatic shutdown, display intensity

Storage of images

Image storage	Standard JPEG, including measurement data, on memory card

Digital camera

Built-in digital camera	2.3 Mpixels (1536 × 1536 pixels), and two LED lights
Digital camera, focus	Minimum focus distance 0.4 m (1.3 ft.)

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Laser pointer

Laser	Semiconductor AlGaInP diode laser, Class 2

Data communication interfaces

USB	• USB-A: Connect external USB device (copy to memory stick) • USB Mini-B: Data transfer to and from PC / streaming MPEG-4

Power system

Battery	Li Ion (field replaceable), 5 hours operating time
Charging system	In camera, AC adapter, 2-bay charger or 12 V from a vehicle
Power management	Automatic shutdown (user selectable)
AC operation	AC adapter, 90–260 VAC, 50/60 Hz, 12 V output to camera

Environmental data

Operating temperature range	–15 to +50°C (+5 to +122°F)
Storage temperature range	–40 to +70°C (–40 to +158°F)
Humidity (operating and storage)	IEC 68-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)
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	0.60 kg (1.32 lb)
Camera size (L × W × H)	235 × 81 × 175 mm (9.3 × 3.2 × 6.9 in.)

Scope of delivery

• Hard transport case
• Infrared camera with lens
• Battery
• Calibration certificate
• FLIR QuickReport™ PC software CD-ROM
• Memory card with adapter
• Power supply, incl. multi-plugs
• Printed Getting Started Guide
• Printed Important Information Guide
• USB cable
• User documentation CD-ROM
• Warranty extension card or Registration card

http://www.flir.com