FLIR b50

FLIR b50 a lightweight, competent infrared camera. Li Ion batteries allow work for 5 hours without interruption of charging. The FLIR LED lights make it possible to work even in dark environments. Insulation alarm and Dew point alarm are perfect in a building site. The visual 2.3 Mpixel digital camera and three step Fusion Picture in Picture functionality helps produce radiometric JPEG images in a professional way. FLIR QuickReport™ software makes it possible to analyze IR and visual pictures captured in field back in the office.

- *IR resolution 140 x 140 pixels*
- *Digital camera 1536 x 1536 pixels*
- *Lightweight 600 g*
- *Laser Pointer*
- *Copy to USB*
- *Fusion (3 steps Picture in Picture)*

- *5 hours battery*
- *LED lights*
- *21 languages*
- *Dew point & Insulation alarm*
- *NETD 90 mK*

FLIR b50 Features

- **Digital Camera** — 2.3 Megapixels with built-in LED lights provides sharp images regardless of lighting conditions
- **Picture in Picture (PiP)** — Displays resizable IR image super-imposed over a digital image
- **Wide Temperature Range** — Measures from -20 °C to +120 °C targeting building applications
- **± 2% Accuracy** — Reliable temperature measurement
- **Insulation alarm** — Shows the insulation performance of the building structure
- **Dew point alarm** — Alerts you to the areas where there is a risk of condensation
- **Thumbnail Image Gallery** — Allows quick search of stored images
- **Laser Pointer** — Pinpoints the hot spot on the IR image with the real physical target
- **Micro SD Card** — Stores more than 2000 radiometric JPEG images

140 x 140 pixel resolution

Fusion (3 steps PiP)

Built-in LED lights
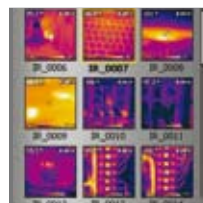
Thumbnail Image Gallery
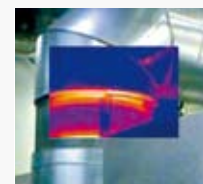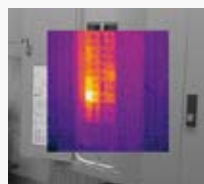
Fusion (3 steps Picture in Picture)
Allows for easier identification and interpretation of infrared images. This advanced technology enhances the value of an infrared image by allowing you to overlay it directly over the corresponding visible image. This functionality combines the benefits of both the infrared image and visual picture at the push of a button.

FLIR b50 Specifications

Imaging and optical data

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Field of view (FOV) / Minimum focus distance	25° × 25° / 0.10 m (0.33 ft.)
Spatial resolution (IFOV)	3.12 mrad
Thermal sensitivity/NETD	<0.09 °C (<0.16 °F) @ +25 °C (+77 °F) / 90 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)
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 temperatur
Isotherm	1 with above/below
Dew point alarm	Yes
Insulation alarm	Yes

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.)

Laser pointer

Laser	Semiconductor AlGaInP diode laser, Class 2

Data communication interfaces

Interfaces	USB-mini, USB-A

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

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

Applications
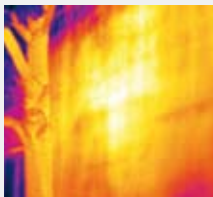
Building: Water and mildew in wall

Building: Heat Loss

Electrical: Hot Fuses

Authorised FLIR dealer:

T820102(en-SV)_A