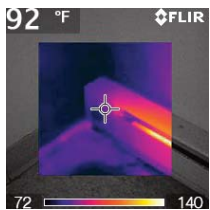


# b-Series InfraRed Camera (140 x 140 IR Resolution)

With on board Visual Camera, Picture-in-Picture Fusion, and Bright LED Lights

- 0.09°C @ 25°C Thermal Sensitivity
- Bright LED Lights
- Picture-in-Picture Fusion (3-Fixed Steps)
- 3.5" Razor Sharp color LCD Display
- Lightweight (1.3lbs)
- Area Min/Max Spot Marker
- Analysis/Reporting Software included



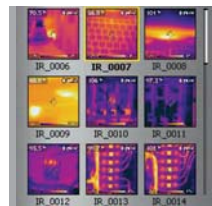
Picture-in-Picture (PIP) Fusion



Built-in Laser Pointer



Built-in Illuminator Lights



Thumbnail Image Gallery



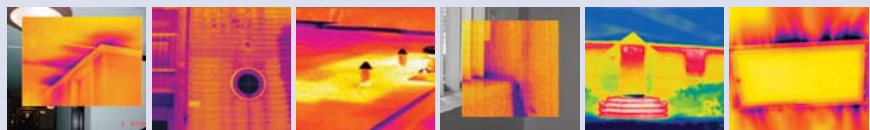
## FLIR b50 Features

- **High Resolution IR Images** — 19,600 pixels (140 x 140) Infrared resolution
- **Visible Light Digital Camera** — 2.3MP resolution with flash provides sharp images regardless of lighting conditions
- **Insulation Alarm** — Detects areas that don't fulfill the insulation requirements
- **Dew Point Alarm** — Displays areas with risk of surface condensation where mold growth could occur
- **Picture in Picture (PIP) Fusion** — Displays thermal image super-imposed over a digital image and is scalable in 3-fixed steps to resize the thermal image
- **Bright LED Lights** — Allow the visual camera and fusion to be used in poorly lit environments
- **Optimized Temperature Range** — From -4 to 248°F (-20 to 120°C) targeting insulation, HVAC, and building applications
- **± 2% Accuracy** — reliable temperature measurement
- **Thumbnail Image Gallery** — Allows quick search of stored images
- **Li-Ion Rechargeable Battery** — lasts >5hrs continuous use; replaceable
- **Copy to USB** — Easy upload of images from camera to USB memory stick
- **Laser LocatIR™ Pointer** — Pinpoints a reference spot
- **Area (Min/Max) Mode** — Shows the Minimum or the Maximum Temperature reading within the selected area
- **Includes** — Memory Card with adapter (stores >1000 Radiometric JPEG images), Li-Ion rechargeable battery, power supply, QuickReport software, USB cable, hand strap, camera lens cap, and hard case



Warranty extended to 2 years when the camera is registered

## Applications



Water Damage — Water leak on ceiling, wall, and roof top

Insulation — Energy Loss, Home Inspection, and HVAC



**The Difference is Training**  
Insurance companies, restoration firms, building owners, and thermographers already involved in building maintenance and operations require a thorough applications training curriculum leading to certification in infrared building science. In response, the Infrared Training Center (ITC) and the Building Science Institute (BSI) have developed a course for those wishing to receive Building Science Certification. These courses address the Best Practices of the cleaning and restoration industry with content drawn from extensive field experience in thermography and building construction. They include references to actual cases illustrating how IR thermography has pinpointed sources of building moisture, provided definitive Cause and Origin data, enabled energy savings, and prevented incipient catastrophes. The Building Science series emphasizes practical real-world skill building, and includes infrared theory relevant to these skills.

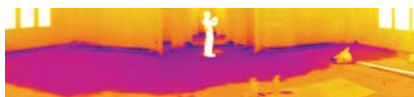
### Software Packages

**QuickReport™** PC software enables users to Organize, Analyze and Create Reports with FLIR Cameras.

**FLIR BuildIR Software** package specifically designed to carry out advanced analysis of building structures. It is used to analyze images taken with an infrared camera, and create inspection reports based on these images.

**FLIR Reporter Ver. 8.5** is a powerful software for creating compelling and professional, fully customized, easy-to-interpret reports in a standard MS Word Document. You can create a report by simply Dragging and Dropping your images on a desktop icon or using the Wizards to guide you step-by-step through the process. The saved document is a "live" report with full access to the analysis tools and temperature measurement data. The reports can be multi-page and include all of your IR inspection data -infrared and visual images, temperature measurements, voice comments and text notes.

**Panorama Function** allows you to conveniently piece together normal sized images to create one large image for a wide angle view of the area being measured by using FLIR BuildIR or Reporter Software package



### Picture-in-Picture Fusion (3-Fixed Steps)

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. The 3 fixed steps feature permits you to resize the thermal image as needed on a large 3.5" color display.

### Dew Point Alarm

Displays building areas where surface condensation is present which shows a potential for mold growth

### Insulation Alarm

Identifies insufficient insulation in building areas where insulation requirements are not met.

## FLIR b50 Specifications

Features	
Temperature range	-4°F to 248°F (-20°C to 120°C)
Image Storage	>1000 radiometric JPEG images (SD card memory)
Imaging Performance / Image Presentation	
Frame Rate	9Hz
Field of view/min focus distance	25° x 25°/3.9" (0.1m)
Focus	Manual (Minimum focus distance 1.3ft/0.4m)
Thermal sensitivity (N.E.T.D)	<0.09°C at 25°C
Detector Type - Focal plane array (FPA) uncooled microbolometer	140 x 140 pixels
Spectral range	7.5 to 13µm
Display	Built-in 3.5" color LCD
Image modes	Thermal/Visual/Picture-in-Picture Fusion (3-fixed steps)
Video Lamps	Bright LED lamps
Laser Classification/Type	Class 2/Semiconductor AlGaInP Diode Laser: 1mW/635nm (red)
Set-up controls	Mode selector, color palettes, configure info to be shown in image, local adaptation of units, language, date and time formats, and image gallery
Measurement modes	1 Spotmeter (Center spot), 1 Box area (full image with min/max), 1 Isotherm (above/below)
Measurement correction	Reflected ambient temperature & emissivity correction
Battery Type/operating time	Li-Ion/ >5 hours, Display shows battery status
Charging system	In camera AC adapter/2 bay charging system
Shock	25G, IEC 68-2-29
Vibration	2G, IEC 68-2-6
Dimensions/Weight	9.3x3.2x6.9" (235x81x175mm)/<1.32lbs (600g), including battery
Warranty	2 years (Warranty extended to 2 years when the camera is registered)

## Ordering Information

Part Number	
39904-1401	FLIR b50 Thermal Imaging InfraRed Camera (140x140)
ACCESSORIES	
1196398	Li-Ion Rechargeable Battery
1910399	AC Adapter Charger (110-240V, U.S. Plug)
1910490	Cigarette Lighter Adapter Kit, 12VDC (1.2m cable)
T197650	2-Bay Battery Charger including Power Supply (multi plugs)
1122000	Camera Pouch Case
T197613	BuildIR Software package
T197717	FLIR Reporter Ver. 8.5 Professional
CERTIFICATION TRAINING	
T-BSC	Certification in Infrared Building Science per attendee (3.5 Day Class)
ITC-RESNRG-2	Thermal Imaging for Residential Energy Audits Training per attendee (2 Day Class)
ITC-RESNRG-4	Thermal Imaging for Residential Energy Audits Certification per attendee (4 Day Class)

EMLab P&K [www.emlabpk.com](http://www.emlabpk.com) 888-836-5227

Specifications and prices subject to change without notice. Rev. 03/03/10-R1  
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