

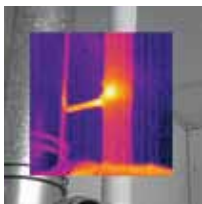


FLIR E40bx  
For building applications

# E-Series InfraRed Camera (160 x 120 IR Resolution)

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

- 0.045°C @ 30°C Thermal Sensitivity
- Bright LED Light
- Annotate Images with Voice
- Picture-in-Picture (Fixed)
- 3.5" Touch-Screen LCD Display
- 2X Continuous Zoom
- Area Min/Max with Auto Hot/Cold Spot Marker
- Delta T - Differential Temperature
- Humidity and Insulation Alarm for building applications



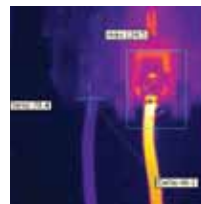
Picture-in-Picture (PIP) Fusion



Built-in Laser Pointer



Built-in Illuminator Light



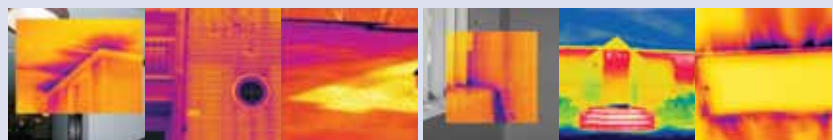
Differential Temperature

## FLIR E40bx Features

- **High Resolution IR Images** - 19,200 pixels (160 x 120) Infrared resolution
- **Visible Light Digital Camera** - 3MP resolution with flash provides sharp images regardless of lighting conditions
- **Picture in Picture (PIP)** - Displays thermal image super-imposed over a digital image
- **Bright LED Light** - Allows the visual camera and fusion to be used in poorly lit environments
- **Optimized Temperature Range** - From -20° to +120°C targeting 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 with a laser
- **Laser Marker** - Marks the point on the IR displayed image as to where the Laser pointer is targeting
- **IR Window Correction** - Software settings allow you to account for transmission loss through IR windows
- **Area (Min/Max) Mode** - Shows the Minimum or the Maximum Temperature reading within the selected area
- **Auto Hot/Cold Spot Marker** - Marks the area that automatically finds the hottest or coldest spot within the box
- **Voice Comment Recording and Text** - on images & can be integrated onto report
- **Wireless Communication** - Bluetooth® transmitter with METERLINK™
- **Humidity and Insulation Alarm** - identifies where surface condensation and insufficient insulation in building areas is present
- **Includes** - Hard transport case, Infrared camera with lens, Battery, Calibration certificate, Camera lens cap, FLIR Tools software CD-ROM Handstrap, Memory card, Power supply, incl. multi-plugs Printed Getting Started Guide Printed Important Information Guide, USB cable, User documentation CD-ROM, Video cable, Warranty extension card or Registration card



## Applications



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

Insulation - Energy Loss, Home Inspection, and HVAC



Warranty extended to 2 years when the camera is registered

# FLIR E40bx Specifications

Imaging and optical data	
Field of view (FOV)/Minimum focus distance	25°×19°/0.4m(1.31ft.)
Spatial resolution (IFOV)	2.72mrad
Thermal sensitivity/NETD	<0.045°C@+30°C(+86°F)/45mK
Image frequency	60Hz
Focus	Manual
Zoom	1–2×continuous, digital zoom, including panning
Focal Plane Array (FPA)/Spectral range	Uncooled microbolometer/7.5–13µm
IR resolution	160×120pixels
Image presentation	
Display	Touchscreen, 3.5in. LCD, 320×240pixels
Image modes	IR image, visual image, picture in picture, thumbnail gallery
Picture in Picture	Fixed IR area on visual image
Measurement	
Object temperature range	–20°C to +120°C (–4°F to +248°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading
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
Measurement corrections	Reflected temperature, optic transmission and atmospheric transmission
Humidity alarm	1 humidity alarm, including dewpoint alarm
Insulation alarm	1 insulation alarm
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	IR/visual images; simultaneous storage of IR and visual images
Digital camera	
Built-in digital camera	3.1 Mpixel (2048×1536 pixels), and one LED light
Built-in digital lens data	FOV 53°×41°
Data communication interfaces	
Interfaces	USB-mini, USB-A, Bluetooth, Wi-Fi, composite video
Bluetooth	Communication with cellphone, PC, headset and external sensors
USB	<ul style="list-style-type: none"> <li>•USB-A: Connect external USB device</li> <li>•USB Mini-B: Data transfer to and from PC/streaming MPEG-4</li> </ul>
Video out	Composite
Power system	
Battery	Lilon, 4 hours operating time
Charging system	In camera (AC adapter or 12V from a vehicle) or 2-bay charger
Power management	Automatic shutdown and sleep mode (user selectable)
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 60068-2-30/24h 95% relative humidity +25°C to +40°C (+77°F to +104°F)/2 cycles
Encapsulation	IP54 (IEC 60529)
Bump	25g (IEC 60068-2-29)
Vibration	2g (IEC 60068-2-6)
Physical data	
Camera weight, incl. battery	0.825kg (1.82lb.)
Camera size (L×W×H)	246×97×184mm (9.7×3.8×7.2in.)
Tripod mounting	UNC ¼"–20 (adapter needed)
Optional lens and connecting meters:	
IR lens f=30mm, 15° incl. case	•EX845: Clamp meter + IR therm TRMS 1000AAC/DC
IR lens f=10mm, 45° incl. case	•MO297: Moisture meter, pinless with memory

## METER LiNK



METERLiNK frees the Thermographer from the manual process of collecting field data



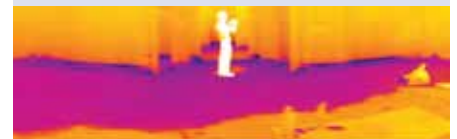
Infrared cameras quickly locate moisture related problems



Collecting moisture readings on damaged surfaces and associating them with regions on an infrared image can be a complicated and cumbersome process



Manual data collection is time-consuming and prone to errors. METERLiNK eliminates this problem by allowing the thermographer to quickly take moisture readings on a damaged surface and associate those readings with the corresponding targets stored in an infrared image



### Optional Software Packages

**FLIR Reporter Professional** 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.

**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.

**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.



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