## **\$FLIR**

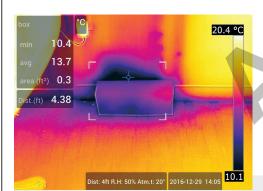


#### BUILDING APPLICATIONS

# FLIR EXX-SERIES™

The FLIR E75, E85, E95, and the entry-level E53 Advanced Thermal Imaging Cameras bring superior sensitivity and a true 42° field of view\* together in a user-friendly, handheld platform. These cameras feature a vibrant 4" LCD that makes it easy to spot the subtle indications of building deficiencies and moisture intrusion. With built-in tools such as laser-assisted autofocus\*, on-screen area measurement\*, and Wi-Fi capability, the FLIR Exx-Series will help you quantify and document air leaks, moisture, and other building problems.

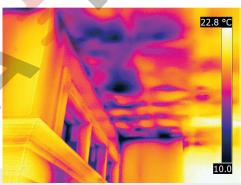
www.flir.com/Exx-Series



#### Find Hidden Deficiencies

Uncover hard-to-find building envelope deficiencies and moisture penetration

- Detects temperature differences down to 0.03°C for early identification of air leaks and moisture
- MSX® image enhancements add perspective to scenes, with edge detail on windows and doors
- The true 42° field of view\* (FOV) standard lens allows for surveys of wide areas with a single lens
- Measure the area (m² or or ft²) of moisture intrusion on screen† with data from laserassisted autofocus\*



#### Document Problems Quickly

Report problems in buildings for insurance claims, pre-insurance audits, and inspections

- Built-in voice annotation and customizable work folders makes finding and documenting problems easier and more efficient
- Connect over Wi-Fi to the FLIR Tools mobile app for faster reporting and sharing of images
- Append images with FLIR moisture meter data via the METERLINK® connection
- Streamlined reporting features through FLIR Tools+ simplifies insurance claims and inspection paperwork



### Inspect More Efficiently

FLIR designed all four Exx-Series cameras to make your work faster, safer, and more efficient

- Vibrant, 4" touchscreen with 160° viewing angle
- Comfort-designed handle and convenient buttons enable safe, one-handed operation
- Rugged, water-tight chassis and scratchresistant Dragontrail™ cover glass
- Backed by FLIR's industry-leading 2-5-10 warranty

\*E75, E85, E95 models \*E85, E95 models

#### **SPECIFICATIONS**

| Features By Camera         | E53   | E75   | E85  | E95   |
|----------------------------|---|---|--|---|
| IR Resolution              | 240 × 180<br>(43,200 pixels)  | 320 × 240<br>(76,800 pixels)  | 384 × 288<br>(110,592 pixels)  | 464 × 348<br>(161,472 pixels)   |
| UltraMax®                  | _   | 307,200 pixels  | 442,368 pixels   | 645,888 pixels  |
| Object Temperature Range   | -20°C to 120°C (-4°F to 248°F)  | -20°C to 120°C (-4°F to 248°F)  | -20°C to 120°C (-4°F to 248°F)   | -20°C to 120°C (-4°F to 248°F)  |
|                            | 0°C to 650°C (32°F to 1200°F)   | 0°C to 650°C (32°F to 1200°F) Optional 300°C to 1000°C (572°F to 1830°F)  | 0°C to 650°C (32°F to 1200°F)<br>300°C to 1200°C (572°F to 2192°F)             | 0°C to 650°C (32°F to 1200°F)<br>300°C to 1500°C (572°F to 2732°F)  |
| Focus                      | Manual  | Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual  | Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual     | Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual  |
| Field of View (FOV)        | 24° × 18°   | $42^{\circ} \times 32^{\circ}$ (10 mm lens), $24^{\circ} \times 18^{\circ}$ (18 mm lens), $14^{\circ} \times 10^{\circ}$ (29 mm lens) | 42° × 32° (10 mm lens), 24° × 18° (18 mm lens), 14° × 10° (29 mm lens)         | $42^{\circ} \times 32^{\circ}$ (10 mm lens), $24^{\circ} \times 18^{\circ}$ (18 mm lens), $14^{\circ} \times 10^{\circ}$ (29 mm lens) |
| Time-lapse (Infrared)      | _   | _   | _  | 10 sec to 24 hours  |
| Laser Area Measurement     | _   | _   | Yes  | Yes   |
| Laser Distance Measurement | _   | Yes, on-screen  | Yes, on-screen   | Yes, on-screen  |
| Measurement Presets        | No measurement, center spot, hot spot, cold spot, 3 spots, hot spot-spot <sup>‡</sup> | No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2  | No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2 | No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2  |
| Spotmeter                  | 3 in live mode  | 3 in live mode  | 3 in live mode   | 3 in live mode  |
| Area                       | 1 in live mode  | 1 in live mode  | 3 in live mode   | 3 in live mode  |
| Picture-in-Picture         | Centered infrared area on the visual image  | Resizable and movable   | Resizable and movable  | Resizable and movable   |

**Common Features** 

 $\begin{array}{ll} \mbox{Detector Type and Pitch} & \mbox{Uncooled microbolometer, 17 } \mbox{$\mu$m$} \\ \mbox{Thermal Sensitivity (NETD)} & \mbox{<0.04°C @ 30°C (86°F), 24° lens} \end{array}$ 

 Spectral Range
 7.5 - 14.0 μm

 Image Frequency
 30 Hz

 F-Number
 f/1.3

 Lens Identification
 Automatic

 Digital Zoom
 1-4x continuous

Image Presentation and Modes

Display 4", 640 × 480 pixel touch screen LCD with auto-rotation

Digital Camera 5 MP, 53° × 41° FOV

Color Palettes Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Image Modes Infrared, visual, MSX®, Picture-in-Picture
MSX® Embosses visual details on full resolution thermal image

Measurement and Analysis

Accuracy  $\pm 2^{\circ}\text{C} (\pm 3.6^{\circ}\text{F}) \text{ or } \pm 2\% \text{ of reading for ambient temperature } 15^{\circ}\text{C}$ 

to 35°C (59°F to 95°F) and object temperature above 0°C (32°F) Moisture alarm, insulation alarm, measurement alarms

Alarms Moisture alarm, insulation alarm, measurement alar Color Alarm (Isotherm) Above/below/interval/condensation/insulation

Compass, GPS Yes; automatic GPS image tagging

METERLINK® Yes; several readings
Laser Pointer Yes; dedicated button

\*Hot spot to center spot Delta measurement

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com

Image Storage

Storage Media Removable SD card (8 GB)

Image File Format Standard JPEG with measurement data included

Video Recording and Streaming

Radiometric IR Video Real-time radiometric recording (.csq)

Recording

Non-Radiometric IR or Visual H.264 to memory card

viidoo

Radiometric IR Video Yes, over UVC or Wi-Fi Streaming

Non-Radiometric IR Video H.264 or MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi

Streaming

Communication Interfaces USB 2.0, Bluetooth, Wi-Fi, DisplayPort

Video Out DisplayPort over USB Type-C

**Additional Data** 

Battery Type

Battery Operating Time

typical u

Operating Temperature Range Storage Temperature Range

Shock/Vibration/ Encapsulation; Safety

Weight/Dimensions

Li-ion battery, charged in camera or on separate charger

Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use

-15°C to 50°C (5°F to 122°F) -40°C to 70°C (-40°F to 158°F)

25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6, IP 54 /IEC 60529;

EN/UL/CSA/PSE 60950-1

1 kg (2.2 lbs), 27.8 × 11.6 × 11.3 cm (11.0 × 4.6 × 4.4 in)

**Box Contents** 

Infrared camera with lens, battery (2 ea), battery charger, front protection, straps (hand, wrist), hard transport case, lanyards, lens caps, lens cleaning cloth, power supplies, 8 GB SD card, Torx wrench, cables (USB 2.0 A to USB Type-C, USB Type-C to USB Type-C, USB Type-C to HDMI)

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