

# FLIR Exx-Series™

## Advanced Thermal Imaging Cameras for Building Applications



FLIR E75, E85, and E95 cameras offer superior sensitivity and a true 42° field of view in a user-friendly, handheld platform. These cameras can detect even subtle indications of building deficiencies and moisture intrusion, and offer on-screen area measurement so you can easily quantify and document air leaks, moisture, and other building problems.

### Find Hidden Deficiencies

*Uncover hard-to-find building envelope deficiencies and moisture penetration, and measure the area of the damage on-screen.*

- Detects temperature differences down to 30 mK for early identification of air leaks and moisture
- MSX® image enhancements add perspective to scenes, with edge detail on windows and doors
- True 42° field of view (FOV) standard lens allows for surveys of wide areas with a single lens
- Measure area (m<sup>2</sup> or ft<sup>2</sup>) of moisture intrusion on screen with data from laser-assisted autofocus

### Document Problems Quickly and Easily

*Report problems in building structures for insurance claims, pre-insurance audits, and building inspections.*

- Built-in voice annotation and customizable work folders makes finding images easier
- Connect over Wi-Fi to mobile devices or via METERLINK® to FLIR moisture meters
- Streamlined reporting features through FLIR Tools+ simplifies insurance claims and inspection paperwork

### Built for Your Rugged Work Environment

*FLIR designed the E75, E85, and E95 to make your work faster, safer, and more efficient.*

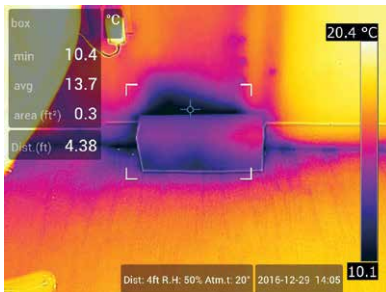
- Vibrant, 4" optically-bonded PCAP touchscreen with 160° viewing angle
- Comfort-designed handle and convenient buttons enable safe, one-handed operation
- Rugged, water-tight chassis and scratch-resistant Dragontrail™ cover glass
- Backed by FLIR's industry-leading 2-5-10 warranty

### Key Features:

- Fast, precise laser-assisted autofocus
- Grip, trigger, and buttons designed for easy one-handed operation
- Sensitive enough to clearly identify hidden building deficiencies
- On-screen area measurement (E85, E95)
- True 42° field of view (FOV)
- Wi-Fi, METERLINK® connectivity
- Streamlined reporting features



Quickly detect moisture intrusion and building deficiencies



Quantify problems through on-screen area measurement (m<sup>2</sup> or ft<sup>2</sup>)



One-handed operation with convenient buttons for safe, streamlined use

## Specifications

Features By Camera	E75	E85	E95
IR Resolution	320 x 240 (76,800 pixels)	384 x 288 (110,592 pixels)	464 x 348 (161,472 pixels)
Object Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F) Optional 300°C to 1000°C (572°F to 1830°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F) 300°C to 1200°C (572°F to 2192°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F) 300°C to 1500°C (572°F to 2732°F)
Time-lapse (Infrared)	No	No	10 sec to 24 hours
Measurement Features by Camera			
Area Measurement Information	No	Yes	Yes
Spotmeter	1 in live mode	3 in live mode	3 in live mode
Area	No	3 in live mode	3 in live mode
Common Features		Exx-Series	
Detector Type and Pitch	Uncooled microbolometer, 17 µm		
Thermal Sensitivity/NETD	< 0.03°C @ 30°C (86°F)		
Spectral Range	7.5 - 14.0 µm		
Image Frequency	30 Hz		
Field of View (FOV)	42° x 32° (10 mm lens), 24° x 18° (17 mm lens), 14° x 10° (29 mm lens)		
F-Number	f/1.1, f/1.3		
Lens Identification	Automatic		
Focus	Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual		
Digital Zoom	1-4x continuous		
Image Presentation and Modes			
Display	4", 640 x 480 optically-bonded PCAP touchscreen, with 400 cd/m <sup>2</sup> surface brightness		
Digital Camera	5 MP, 53° x 41° FOV		
Color Palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC		
Image Modes	Infrared, visual, MSX®, Picture-in-Picture		
Picture-in-Picture	Resizable and movable		
MSX®	Embosses visual details on full resolution thermal image		
UltraMax™	Super-resolution process quadruples pixel count, activated in FLIR Tools+		
Measurement and Analysis			
Accuracy	±2°C (±3.6°F) or ±2% of reading for ambient temperature 15°C to 35°C (59°F to 95°F) and object temperature above 0°C (32°F)		
Alarms	Moisture alarm, insulation alarm, measurement alarms		
Color Alarm (Isotherm)	Above/below/interval/condensation/insulation		
Laser Distance Measurement	Yes, on-screen		
Measurement Presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2		
Compass, GPS	Yes; automatic GPS image tagging		
METERLiNK®	Yes; several readings		
Image Storage			
Storage Media	Removable SD card (8 GB)		
Image File Format	Standard radiometric JPEG, measurement data included		
Video Recording and Streaming			
Radiometric IR Video Recording	Real-time radiometric recording (.csq)		
Non-Radiometric IR or Visual Video	H.264 to memory card		
Radiometric IR Video Streaming	Yes, over UVC or Wi-Fi		
Non-Radiometric IR Video Streaming	H.264 or MPEG-4 over Wi-Fi MJPEG over UVC or Wi-Fi		
Communication Interfaces	USB 2.0, Bluetooth, Wi-Fi		
Video Out	DisplayPort over USB Type-C		
Additional Data			
Battery Type	Li-ion battery, charged in camera or on separate charger		
Battery Operating Time	Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use		
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)		
Shock/Vibration/Encapsulation; Safety	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6, IP 54 / IEC 60529; EN/UL/CSA/PSE 60950-1		
Weight/Dimensions w/o Lens	1 kg (2.2 lbs), 27.8 x 11.6 x 11.3 cm (11.0 x 4.6 x 4.4 in)		
Box Contents			
Packaging	Infrared camera with lens, battery (2 ea), battery charger with power supply, front lens and light protection, straps (hand and wrist), lanyards, lens caps (front and rear), lens cleaning cloth, 15 W3 A power supply, printed documentation, 8 GB SD card, Torx screwdriver, cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C)		

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