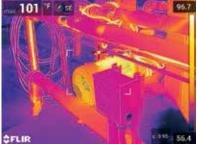


reddot award 2017 best of the best



Find problems quickly and eliminate costly plant shutdowns



Streamlined data collection and sharing speeds analysis and repairs



One-handed operation with convenient buttons helps maintain workplace safety

# FLIR Exx-Series Advanced Thermal Imaging Cameras for Electrical and Mechanical Applications

FLIR E75, E85, and E95 cameras offer the superior resolution and range performance needed to guickly identify hot spots and discover potential points of failure in electrical distribution and mechanical systems. With up to 161,472 pixel resolution and a larger, more vibrant LCD screen than any other pistol-grip thermal camera, the Exx-Series makes it easier than ever to diagnose problems - even at a distance. Avoid costly shutdowns and lost production time through regular predictive maintenance routines with these rugged, intuitive cameras.

# **Improve Plant Reliability**

Equipment failures are costly and can impact on-time delivery, so it's important to have the right tools to find potential problems before they happen.

- High-resolution infrared detectors, up to 464 x 348, for crisp, detailed images
- Wide temperature ranges: -40°C to 120°C, 0°C to 650°C, 300°C up to 1500°C (E95)
- Superior spot-size performance for accurate temperature measurements on smaller, more distant targets
- Laser-assisted autofocus for precise identification of hot spots, even in cluttered scenes

# **Increase Plant Safety**

The Exx-Series improves plant safety by helping you diagnose and report electrical problems before they result in fire or damage.

- Detect temperature differences down to 30 mK for immediate identification of failing components
- Interchangeable lenses, from wide angle to telephoto, offer complete coverage of near and far targets
- Lenses auto-calibrate with camera for the most precise temperature readings
- MSX<sup>®</sup> image enhancement adds the depth and detail to image

# **Designed to Make Your Work Easier**

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

- Rapid-response touch screen with intuitive new user interface
- Convenient menu buttons allow for one-handed operation
- New folder and naming structure that makes finding images easier
- Connect over Wi-Fi to mobile devices or via METERLINK® to FLIR clamps and multimeters

## **Key Features:**

- 320 x 240 464 x 348 true native resolution
- Laser-assisted autofocus
- Wide temperature ranges, up to 1500°C
- Vibrant, 4" optically-bonded PCAP touchscreen with 160° viewing angle
- Wi-Fi, METERLiNK<sup>®</sup> connectivity
- Streamlined reporting features
- FLIR's industry-leading 2-5-10 warranty



# **Specifications**

Features By Camera	E75	E85	E95
IR Resolution	320 × 240	384 x 288	464 x 348
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	1	
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)	24° x 18° (17 mm lens), 42° x 32° (10 mm lens), 14° x 10° (29 mm lens)		
F-Number	f/1.3, f/1.1		
Lens Identification	Automatic		
Focus	Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual		
Digital Zoom	1-4x continuous		
Image Presentation and Mo	udoo		
Display		and a PCAR touchaoroon with 400	ad/m <sup>2</sup> autoco brightnana
Display Digital Camera	4", 640 x 480 optically-bonded PCAP touchscreen, with 400 cd/m <sup>2</sup> surface brightness 5 MP, 53° x 41° FOV		
Color Palettes	5 MP, 53° x 41° FOV Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC		
Image Modes Picture-in-Picture	Infrared, visual, MSX®, Picture-in-Picture Resizable and movable		
MSX®			
lviSX® UltraMax™	Embosses visual details on full resolution thermal image Super-resolution process guadruples pixel count, activated in FLIR Tools+		
		process quadruples pixel count, activa	ated 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 Stream		Tadiometric 3FEG, measurement dat	
Radiometric IR Video Recording		Real time a realizer strip recording ( and	
Non-Radiometric IR	Real-time radiometric recording (.csq) H.264 to memory card		
or Visual Video		H.204 to memory card	
Radiometric IR Video Streaming	Yes, over UVC or Wi-Fi		
Non-Radiometric IR Video	H.264 or MPEG-4 over Wi-Fi		
Streaming	MJPEG over UVC or Wi-Fi		
Communication Interfaces	USB 2.0, Bluetooth, Wi-Fi		
Video Out	DisplayPort over USB Type-C		
Additional Data	<u> </u>		
Battery Type	Li-ion bat	tery, charged in camera or on separa	te charger
Battery Operating Time		rs at 25°C (77°F) ambient temperatur	*
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/	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6, IP 54 /IEC 60529; EN/UL/CSA/PSE 60950-1		
Encapsulation; Safety	]	,	
Weight/Dimensions w/o Lens	1 kg (2.2	2 lbs), 27.8 x 11.6 x 11.3 cm (11.0 x 4.6	6 x 4.4 in)
Box Contents			
Packaging	straps (hand and wrist), lanyards	(2 ea), battery charger with power su , lens caps (front and rear), lens clean ;ard, Torx screwdriver, cables (USB 2 HDMI, USB Type-C to USB Type-C)	ing cloth, 15 W3 A power supply,

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