# **\$**FLIR



### ELECTRICAL/MECHANICAL APPLICATIONS

FLIR EXX-SERIES<sup>™</sup>

The FLIR E75, E85, E95, and the entry-level E53 Advanced Thermal Imaging Cameras offer the superior resolution and range performance needed to quickly identify hot spots and discover potential points of failure in electrical distribution and mechanical systems. With up to 161,472 pixels resolution and a more vibrant LCD screen than any other pistol-grip 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.

www.flir.com/Exx-Series

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## M S J ELECTRONICS



## **Improve Plant Reliability**

Equipment failures are costly and can impact on-time delivery, so it's important to find hidden problems early

- High-resolution infrared detectors, up to 464 x 348, for crisp, detailed images
- Wide temperature ranges with optional calibrations up to 1500°C (2732°F)
- 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 cameras will help you diagnose and report electrical and mechanical failures before they lead to fires or explosions

- Detect temperatures as small as <0.04°C (24° lens) for immediate identification of failing components
- Interchangeable lenses<sup>\*</sup> offer complete coverage of near and far targets
- Lenses auto-calibrate<sup>\*</sup> with camera for the most precise temperature readings
- MSX<sup>®</sup> image enhancement adds the depth and detail to image

# VISIT WEBSITE



Make Your Work Easier FLIR designed all four Exx-Series cameras with features that streamline your workday

- Rapid-response touchscreen 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<sup>®</sup> to FLIR clamps and multimeters

\*E75, E85, E95 models

## SPECIFICATIONS

Features By Camera	E53	E75		E85		E95
IR Resolution	240 × 180 (43,200 pixels)	320 × 240 (76,800 pixels)		384 × 288 (110,592	pixels)	464 × 348 (161,472 pixels)
UltraMax <sup>®</sup>	—	307,200 pixels		442,368 pixels		645,888 pixels
Object Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F)	-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)
Focus	Manual Continuous, one-shot laser distar meter (LDM), one-shot contrast,			Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual		Continuous, one-shot laser distance meter (LDM), one-shot contrast, manua
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*	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	1 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 movab		able	Resizable and movable
Common Features			Image St	orage		
Detector Type and Pitch	Uncooled microbolometer, 17 µm		Storage Media		Removable SD card (8 GB)	
Thermal Sensitivity/NETD	<0.04°C @ 30°C (86°F), 24° lens		Image File Format		Standard JPEG with measurement data included	
Spectral Range	7.5 - 14.0 μm		Video Recording and Stre		aming	
Image Frequency	30 Hz		Radiometric IR Video		Real-time radiometric recording (.csq)	
Field of View (FOV)	42° × 32° (10 mm lens), 24° × 18° (18 mm lens), 14° × 10° (29 mm lens)		Recording Non-Radiometric IR		H.264 to memory card	
F-Number	f/1.3		or Visual Video Radiometric IR Video		Voc. over LIVC or Wi Ei	
Lens Identification	Automatic		Streaming		Yes, over UVC or Wi-Fi	
Digital Zoom	1-4x continuous		Non-Radiometric IR Video		H.264 or MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi	
Image Presentation and Modes			Streaming			
Display	4", 640 × 480 pixel touch screen LCD with auto-rotation		Communication Interfaces		USB 2.0, Bluetooth, Wi-Fi, DisplayPort	
Digital Camera	5 MP, 53° × 41° FOV		Video Out		DisplayPort over USB Type-C	
Color Palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC		Additional Data			
Image Modes	Infrared, visual, MSX <sup>®</sup> , Picture-in-Picture		Battery Type		Li-ion battery, charged in camera or on separate charger	
MSX® Embosses visual details on full resolution thermal image Measurement and Analysis			Battery Operating Time		Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use	
Accuracy	$\pm2^\circ\text{C}$ (±3.6°F) or $\pm2\%$ of reading for ambient temperature 15°C to 35°C (59°F to 95°F) and object temperature above		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)	
Alarms	0°C (32°F) Moisture, insulation, and measurement		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	
Color Alarm (Isotherm)	Above/below/interval/condensation/insulation		1 ,		1 kg (2.2 lbs), 27.8 × 11.6 × 11.3 cm (11.0 × 4.6 × 4.4 in)	
Compass, GPS	Yes; automatic GPS image tagging		Box Contents			· · ·
METERLINK <sup>®</sup>	Yes; several readings				Infrared camera with	lens, battery (2 ea), battery charger,
Laser Pointer				front protection, stra lanyards, lens caps, l	ps (hand, wrist), hard transport case, ens cleaning cloth, power supplies, 8 GB , cables (USB 2.0 A to USB Type-C, USB	
Hot spot to center spot Delta m	easure/IIEIIL					C, USB Type-C to HDMI)

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

### CORPORATE

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The World's Sixth Sense\*

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