FLIR Exx-Series

ADVANCED THERMAL IMAGING CAMERAS

SPECIFICATIONS

Model	E54	E76	E86	E96
IR resolution	320 × 240 pixels	320 × 240 pixels	464 × 348 pixels	640 × 480 pixels
Resolution with UltraMax® enhancement	—	307,200 pixels	645,888 pixels	1.2 megapixels
MSX® image enhancement	Yes: details from visual camera add depth and perspective			
Built-in visual camera	5 MP, fixed focus, with built-in LED light			
Thermal sensitivity	<40 mK @ 30°C (86°F)	<30 mK @ 30°C (86°F), 42° lens	<30 mK @ 30°C (86°F), 42° lens	<30 mK @ 30°C (86°F), 42° lens
Temperature range	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)	-20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F)
Optional temperature range	—	300°C to 1000°C (572°F to 1832°F)	—	—
Accuracy	±2°C (±3.6°F) or ±2% of the reading			
Focus modes	Manual	Continuous laser distance meter (LDM), one-shot LDM, one-shot contrast, manual	Continuous LDM, one-shot LDM, one-shot contrast, manual	Continuous LDM, one-shot LDM, one-shot contrast, manual
Digital zoom	1–4x continuous			1–8x continuous
Measurement tools	3 spotmeters in live mode, 1 area meter in live mode	3 spotmeters in live mode, 3 area meters in live mode		
Measurement presets	None, center spot, hot spot, cold spot, 3 spots, hot spot-spot*	None, center spot, hot spot, cold spot, User Presets 1&2		
Available lenses	None (fixed lens)	14°, 24°, 42°, macro (2x)		
Lens identification	—	Automatic (FLIR AutoCal™)		
1-Touch Level/Span	Yes: automatic contrast enhancement			
Laser pointer	Yes			
Laser distance meter	—	Yes		
Area measurement information	—	—	Yes	
On-camera routing software	FLIR Inspection Route™ — enabled			
On-camera report building	Voice annotation and GPS tagging to images and video; on-screen text; sketch on infrared images from touchscreen			
FLIR software integration	FLIR Thermal Studio Starter, FLIR Thermal Studio, FLIR Thermal Studio Pro, FLIR Research Studio			
Radiometric JPEG	Yes			
IR, radiometric, visual video recording	Yes			
IR, radiometric, visual video streaming	Yes, over UVC (radiometric, non-radiometric, visual) and Wi-Fi (non-radiometric, visual)			
Communication modes	USB 2.0, Bluetooth®, Wi-Fi, DisplayPort			
METERLiNK®	Yes			
Display	640 × 480 pixels (VGA) Dragontrail® touchscreen			
Drop-testing	3 m (6.6 ft)			
Battery operation time	>2.5 hours, typical use			

*Hot spot to center spot Delta measurement

Specifications are subject to change. For the most up-to-date specifications, please visit flir.com.

FLIR AutoCal™ Lenses

FLIR E76, E86, and E96 cameras are compatible with all of our interchangeable AutoCal lenses. The camera automatically recognizes when a new lens is attached and launches a wizard to begin auto-calibrating the camera with the lens—no need to send the camera in for service. This helps ensure the camera always produces high-quality images and precise thermal measurements.

WHAT LENS DO YOU NEED?

14°, 29 mm lens: this telephoto lens has a narrow field of view for precise focus and crisp imaging of distant targets.

24°, 17 mm lens: often considered the "standard" lens, the 24° × 18° field of view allows users to remain a safe distance from energized equipment (e.g. 3 m/6.6 ft) while still obtaining a crisp focus on smaller targets.

42°, 10 mm lens: this wide-angle lens captures the largest field of view for imaging buildings, roofs, or other areas where it's important to gather the most information in a single image.

THE Exx-SERIES and FLIR THERMAL STUDIO PRO

EMPOWERED WITH REPORTING SOLUTIONS TO STREAMLINE INSPECTIONS

Exx-Series cameras are the first FLIR models to come with our exclusive Inspection Route Camera Option automatically enabled in the camera.

Designed for thermographers who regularly inspect large numbers of objects over the course of a day, FLIR Inspection Route guides the user along a pre-defined route of inspection points so they can collect images and data in a structured manner.

The route begins in FLIR Thermal Studio Pro software, where users build their plan using the Route Creator plugin. They can include as many inspection targets as needed and organize them for maximum efficiency. Once they export the completed route to the Exx camera, they're ready to begin the day.

The predefined route guides the user's on-site movement to each inspection asset, automatically collecting and organizing saved images for a seamless import into FLIR Thermal Studio Pro. By ensuring that nothing is missed and that all inspection results are organized from the start, the suite of FLIR inspection software speeds up inspections, improves organization, and simplifies reporting.

Learn more about FLIR Thermal Studio Pro, the FLIR Route Creator Plug-in, and the FLIR Inspection Route Camera Option at FLIR.com.

www.flir.com/exx-series