



FLIR Exx-SERIES

ADVANCED THERMAL IMAGING CAMERAS

SPECIFICATIONS

Model	E54	E76	E86	E96
IR resolution	320 x 240 pixels	320 x 240 pixels	464 x 348 pixels	640 x 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		
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 Suite, 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			
Cloud services	FLIR Ignite™ for direct, secure image uploading, organizing, and sharing via Wi-Fi (firmware update required for models purchased prior to 2022)			
METERLiNK®	Yes via Bluetooth			
Display	640 x 480 pixels (VGA) Dragontrail® touchscreen			
Drop-testing	2 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 teledyneflir.com.

FLIR AUTOCAL™ LENSES

FLIR E76, E86, and E96 camera are compatible with all 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 now come with our exclusive Inspection Route option already enabled. Combined with FLIR reporting, plug-in, and cloud options, this is thermal imaging logistics at its best.

If you regularly check the condition of a lot of equipment and components over the course of a day, FLIR Inspection Route can make your life much easier. Let your camera lead you to predefined inspection points, and collect images and data in a more structured, logical workflow.

Build your roadmap in FLIR Thermal Studio Pro software with the Route Creator plugin. Include as many inspection targets as needed and organize them for maximum efficiency. Once you export the route plan to the Exx camera, you’ll be ready to go.

The predefined route guides your on-site movement to each inspection asset, automatically collecting and organizing saved images. Store them securely and keep everything in order by uploading automatically to FLIR Ignite cloud. Access images and data easily from the cloud, share them with colleagues and clients, and import findings seamlessly into FLIR Thermal Studio Pro.

By ensuring that nothing is missed and that all inspection results are organized right from the start, FLIR inspection software and firmware speeds up surveys, improves organization, and simplifies reporting for more effective and efficient critical decision-making.

Learn more about [FLIR Thermal Studio Pro](#), the [FLIR Route Creator Plug-in](#), and the [FLIR Inspection Route](#) at [FLIR.com](#).

