

FLIR Exx-SERIES

ADVANCED THERMAL IMAGING CAMERAS



SPECIFICATIONS

Resolution with UltraMax*	Model	E52	E54	E76	E86	E96
MSX [®] image enhancement Yes' details from visual camera add depth and perspective Sult in visual camera S.MP, fixed focus, with but in LED light Thermal sensitivity <50 mK @ 30°C (86°F) <30	IR resolution	240 × 180 pixels	320 x 240 pixels	320 × 240 pixels	464 × 348 pixels	640 × 480 pixels
Sulft-in visual camera 5 MP, fixed focus, with built in LED light Thermal sensitivity 50 mK @ 30°C (88°F) <40 mK @ 30°C (88°F) <40 mK @ 30°C (88°F) <20 mK @ 30°C (88°F), 42° lens 20°C to 120°C (4°F to 248°F); (9°C to 580°C (32°F to 1202°F); 300°C to 1500°C (52°F to 1202°F); 300°C to 1500°C (52°F to 1202°F); 300°C to 1500°C (52°F to 1202°F); 300°C to 1500°C (57°F to 2732°F) Optional temperature range — 300°C to 1000°C (52°F to 1202°F); 300°C to 1500°C (57°F to 2732°F)	Resolution with UltraMax®	-		307,200 pixels	645,888 pixels	1.2 megapixels
Thermal sensitivity	MSX® image enhancement	Yes: details from visual o	amera add depth and perspe	ective		
20°C to 120°C 22°C to 120°C 248°F ;	Built-in visual camera	5 MP, fixed focus, with built in LED light				
Temperature range	Thermal sensitivity	<50 mK @ 30°C (86°F)		<30 mK @ 30°C (86°F), 42° lens		
Optional temperature range	Temperature range	(-4°F to 248°F); 0°C to 550°C	(-4°F to 248°F); 0°C to 650°C	(-4°F to 248°F); 0°C to 650°C	0°C to 650°C (32°F to 1	1202°F);
Focus modes Manual Continuous laser distance meter (LDM), one-shot LDM, one-shot LDM, one-shot contrast, manual 1-4x continuous 1-4x cont	Optional temperature range	_			_	-
Digital zoom 1-4x continuous 1-8x continuous	Accuracy	±2°C (±3.6°F) or ±2% of the reading				
Measurement tools 3 spotmeters in live mode, 1 area meter in live mode None, center spot, hot spot, cold spot User Presets 1&2 Available lenses None (fixed lens) 14°, 24°, 42°, 80°, and 14°- 24° FLIR FlexView™ dual field-of-view len 1-Touch Level/Span Yes: automatic contrast enhancement Laser pointer Yes Area measurement Information	Focus modes	Manual				
Measurement presets None, center spot, hot spot, cold spot	Digital zoom	1–4x continuous			1–6x continuous	1–8x continuous
Measurement presets 3 spots, Hot Spot-spot None (fixed lens) 14°, 24°, 42°, 80°, and 14°-24° FLIR FlexView™ dual field-of-view len 1-Touch Level/Span Yes: automatic contrast enhancement Laser pointer Yes Area measurement information On-camera routing software FLIR Inspection Route™ with baseline image comparison and image overlay guidance Voice annotation and GPS tagging to images and video; on-screen text; sketch on infrared images from touchscreen FLIR software integration Radiometric JPEG Yes IR, radiometric, visual video recording IR, radiometric, visual video version and visual video version visual video version versi	Measurement tools	3 spotmeters in live mode, 1 area meter in live mode		3 spotmeters in live mode, 3 area meters in live mode		
Available lenses None (fixed lens) 14°, 24°, 42°, 80°, and 14°- 24° FLIR FlexView™ dual field-of-view len 1-Touch Level/Span Yes: automatic contrast enhancement Laser pointer Yes Area measurement information —	Measurement presets	None, center spot, hot spot, cold spot		None, center spot, hot spot, cold spot		
1-Touch Level/Span Yes: automatic contrast enhancement Laser pointer Yes Area measurement information — — — — — — — — — — — — — — — — — — —		3 spots, Hot Spot-spot User Presets 1&2				
Area measurement information	Available lenses	None (fixed lens)		14°, 24°, 42°, 80°, and 14°- 24° FLIR FlexView™ dual field-of-view lens		
Area measurement information — — — — — — — — — — — — — — — — — — —	1-Touch Level/Span	Yes: automatic contrast o	enhancement			
Information	Laser pointer	Yes				
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 IR, radiometric, visual video recording IR, radiometric, visual video streaming Ves, 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 automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing 2 m (6.6 ft)		-		-	Yes	
FLIR software integration FLIR Thermal Studio Suite, FLIR Research Studio Radiometric JPEG Yes IR, radiometric, visual video recording 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 automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing 2 m (6.6 ft)	On-camera routing software	FLIR Inspection Route™ with baseline image comparison and image overlay guidance				
Radiometric JPEG Yes IR, radiometric, visual video recording IR, radiometric, visual video streaming Communication modes Cloud services FLIR Ignite™ for automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display Drop-testing Yes Yes Ves Ves Ves Ves Ves Ves	On-camera report building					
IR, radiometric, visual video recording IR, radiometric, visual video streaming Communication modes Cloud services FLIR Ignite™ for automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing Yes Yes, over UVC (radiometric, visual) and Wi-Fi (non-radiometric, visual) Sequence of the communication modes and with the camera to the cloud for easy, secure storage, editing, sh and reporting Yes via Bluetooth 2 m (6.6 ft)	FLIR software integration	FLIR Thermal Studio Sui	te, FLIR Research Studio			
recording IR, radiometric, visual video streaming Communication modes USB 2.0, Bluetooth®, Wi-Fi, DisplayPort Cloud services FLIR Ignite™ for automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing Yes Yes Yes Yes 1 Metric Manual Mi-Fi (non-radiometric, visual) All Wi-Fi (non-radiometric, visual) All Wi-Fi (non-radiometric, visual) Wi-Fi (non-radiometric, visual) All Wi-Fi (non-radiometric, visual) All Wi-Fi (non-radiometric, visual) FLIR Ignite™ For automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing	Radiometric JPEG	Yes				
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 automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing 2 m (6.6 ft)		Yes				
FLIR Ignite™ for automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sh and reporting METERLINK® Yes via Bluetooth Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing 2 m (6.6 ft)		Yes, over UVC (radiometric, non-radiometric, visual) and Wi-Fi (non-radiometric, visual)				
And reporting METERLiNK® Yes via Bluetooth Display 640 x 480 pixels (VGA) Dragontrail® touchscreen Drop-testing 2 m (6.6 ft)	Communication modes	USB 2.0, Bluetooth®, Wi-Fi, DisplayPort				
Display 640 × 480 pixels (VGA) Dragontrail® touchscreen Drop-testing 2 m (6.6 ft)	Cloud services	FLIR Ignite™ for automatic uploading of images directly from the camera to the cloud for easy, secure storage, editing, sharin and reporting				
Drop-testing 2 m (6.6 ft)	METERLINK®	Yes via Bluetooth				
	Display	640 x 480 pixels (VGA) Dragontrail® touchscreen				
Battery operation time >2.5 hours, typical use	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 $24^{\circ} \times 18^{\circ}$ 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 a large field of view for imaging buildings, roofs, or other areas where it's important to gather the most information in a single image.

80°, 5 mm lens: this unique ultra wide-angle lens offers an expansive field of view, allowing inspectors to capture large targets in one image, or to inspect in tight spaces where backing up for a wider view is not an option.

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.

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

