



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 | 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 flir.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 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 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