



ELECTRICAL/MECHANICAL APPLICATIONS

FLIR SÉRIE EXX™

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.

<http://www.vortex.com.br/produtos/termovisores>



Garanta o funcionamento

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

Amplie a Segurança

The Exx-Series cameras will help you diagnose and report electrical and mechanical failures before they lead to fires or explosions

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

Facilite o Seu Trabalho

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® 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® | — | 307,200 pixels | 442,368 pixels | 645,888 pixels |
| Object Temperature Range | -20 °C to 120 °C 0 °C to 650 °C | -20 °C to 120 °C 0 °C to 650 °C Optional 300 °C to 1000 °C | -20 °C to 120 °C 0 °C to 650 °C 300 °C to 1200 °C | -20 °C to 120 °C 0 °C to 650 °C 300 °C to 1500 °C |
| Focus | Manual | Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual | Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual | Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual |
| Field of View (FOV) | 24° × 18° | 42° × 32° (10mm lens), 24° × 18° (18mm lens), 14° × 10° (29 mm lens) | 42° × 32° (10mm lens), 24° × 18° (18mm lens), 14° × 10° (29 mm lens) | 42° × 32° (10mm lens), 24° × 18° (18mm lens), 14° × 10° (29 mm lens) |
| Lens Identification | — | Automatic | Automatic | Automatic |
| IFOV | 1.75 mrad | 1.31 mrad | 1.09 mrad | 0.90 mrad |
| 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, centerspot, hotspot, coldspot, User Preset 1, User Preset 2 | No measurement, centerspot, hotspot, coldspot, User Preset 1, User Preset 2 | No measurement, centerspot, hotspot, coldspot, 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 movable | Resizable and movable |

Common Features

| | |
|--------------------------|------------------------------------|
| Detector Type and Pitch | Uncooled microbolometer, 17 µm |
| Thermal Sensitivity/NETD | <0.04 °C @ 30 °C (86 °F), 24° lens |
| Spectral Range | 7.5 - 14.0 µm |
| Image Frequency | 30 Hz |
| F-Number | f/1.3, 24° lens |
| Digital Zoom | 1-4x continuous |

Image Presentation and Modes

| | |
|----------------|--|
| Display | 4", 640 × 480 pixel touch screen LCD with auto-rotation |
| Digital Camera | 5 MP, 53° × 41° FOV |
| Color Palettes | Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC |
| Image Modes | Infrared, visual, MSX®, Picture-in-Picture |
| MSX® | Embosses visual details on full resolution thermal image |

Measurement and Analysis

| | |
|------------------------|---|
| Accuracy | ±2 °C (±3.6 °F) or ±2% of reading for ambient temperature 15 °C to 35 °C (59 °F to 95 °F) and object temperature above 0 °C (32 °F) |
| Alarms | Moisture, insulation, and measurement |
| Color Alarm (Isotherm) | Above/below/interval/condensation/insulation |
| Compass, GPS | Yes; automatic GPS image tagging |
| METERLiNK® | Yes; several readings |
| Laser Pointer | Yes; dedicated button |

*Hot spot to center spot Delta measurement

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

Image Storage

| | |
|-------------------|--|
| Storage Media | Removable SD card (8 GB) |
| Image File Format | Standard JPEG with measurement data included |

Video Recording and Streaming

| | |
|------------------------------------|---|
| Radiometric IR Video Recording | Real-time radiometric recording (.csq) |
| Non-Radiometric IR or Visual Video | H.264 to memory card |
| Radiometric IR Video Streaming | Yes, over UVC or Wi-Fi |
| Non-Radiometric IR Video Streaming | H.264 or MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi |
| Communication Interfaces | USB 2.0, Bluetooth, Wi-Fi, DisplayPort |
| Video Out | DisplayPort over USB Type-C |

Additional Data

| | |
|---------------------------------------|---|
| Battery Type | Li-ion battery, charged in camera or on separate charger |
| Battery Operating Time | Approx. 2.5 hours at 25 °C (77 °F) ambient temperature and typical use |
| 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) |
| Shock/Vibration/Encapsulation; Safety | 25g / IEC 60068-2-27, 2g / IEC 60068-2-6, IP54 / IEC 60529; EN / UL / CSA / PSE 60950-1 |
| Weight/Dimension | 1 kg (2.2 lbs), 27.8 × 11.6 × 11.3 cm (11.0 × 4.6 × 4.4 in) |

Box Contents

Infrared camera with lens, battery (2 ea), battery charger, front protection, straps (hand, wrist), hard transport case, lanyards, lens caps, lens cleaning cloth, power supplies, 8 GB SD card, Torx wrench, cables (USB 2.0 A to USB Type-C, USB Type-C to USB Type-C, USB Type-C to HDMI)

REPRESENTANTE EM MG
VÓRTEX Equipamentos
Rua São Miguel, 703.
Belo Horizonte, MG
Fone: (31) 3427-7700
vortex@vortex.com.br
www.vortex.com.br



Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2018 FLIR Systems, Inc. All rights reserved. (03/18)

17-3307-INS-Exx MFG



The World's Sixth Sense®