ADVANCED THERMAL IMAGING

REIMAGINED FROM THE HANDLE UP

FLIR Exx-Series™

E75 | E85 | E95

FLIR®

BRILLIANCE AT WORK

FLIR redesigned the Exx-Series from the handle up to deliver the best performance, resolution, and sensitivity of any pistol-grip handheld thermal camera.

The new Exx-Series cameras are packed with the features you need to quickly troubleshoot electrical distribution and mechanical systems, so you can avoid equipment failures, increase plant safety, and maximize up-time.

FLIR Exx-Series cameras now offer:

- Interchangeable, auto-calibrating lenses
- Up to 464 x 348 (161,472) IR resolution
- Our best MSX® enhancement
- UltraMax™ processing for 4x pixel resolution
- A larger, 4" display that's 25% brighter
- A responsive new interface
- Improved organization and reporting options

See Greater Detail

- Vibrant LCD is 25% brighter than earlier models
- Large 4" display with 160° viewing angle
- Up to 464 x 348 true native IR resolution
- Improved FLIR MSX® image enhancement

Quantify Potential Problems

- Accurate temperature readings on hot spots
- Wide temperature ranges, up to 1500°C
- Sensitivity to detect minute temperature differences

Focus Fast & True

- Laser-assisted autofocus responds quickly, improves measurement accuracy
- Superior spot-size performance for measurement of small, distant targets
- Interchangeable lenses provide coverage for any target, any scene

UNPARALLELED PERFORMANCE

The new Exx-Series is packed with the high performance features you need to quickly find and report hidden hot spots: a bright, bold new screen, razor-sharp lenses, and a rapid-response user interface.

Navigate Screens Easier

- Quick response capacitive touch screen
- Updated GUI with improved flow and feedback
- Logical navigation on screen and in menus

Report Problems Quickly

- New folder and naming structure makes finding images easier
- Automatic GPS tagging and compass help identify locations
- Wi-Fi connects camera to mobile devices or in-plant networks
- Streamlined reporting features speeds documentation

Vibrant, 4" optically-bonded PCAP touchscreen

Scratch-resistant Dragontrail™ cover glass

Li-ion battery for extended use times

Ergonomic new design for our most comfortable grip

Digital camera moved closer to thermal detector for superior MSX® enhancements

Interchangeable 24°, 42°, and 14° telephoto lenses

Lenses auto-calibrate with the camera

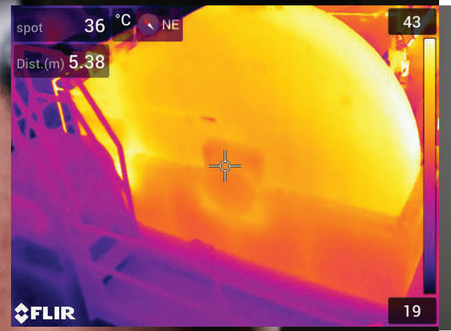
Separate Autofocus and Image Recording buttons

FLIR Exx-Series™
E75 | E85 | E95

HARD-WORKING DESIGN, FOR HARD-WORKING PROS

This sleek new design isn't just window-dressing. From the rubberized, water-tight chassis to the scratch-resistant Dragontrail™ cover glass glass LCD, the new Exx-Series is made for your tough work environment.

EXPANDABLE AND MODULAR



The Best Lenses Need the Best Autofocus

FLIR took its cue from the digital camera industry when re-engineering the Exx-Series focus system. Whether you choose autofocus or continuous focus, the camera's precise focusing algorithm and FLIR's innovative lenses ensure you get crisp results, for the most accurate temperature readings.

Multiple Targets, One Solution

Not every target is small enough or close enough to image with a standard 24° lens. That's why FLIR designed the new Exx-Series with interchangeable 24°, 42°, and 14° lenses – so you can use the same camera for every target you survey. The camera auto-calibrates with each new lens to ensure it produces high-quality images and precise thermal measurements.

Tailored to Your Systems

The new Exx-Series cameras produce standard radiometric JPEGs that can be opened and viewed without proprietary software. These images can be viewed and edited in FLIR Tools, and are supported by FLIR's Strategic Developers Kit (ATLAS SDK). This allows companies to use their own Computerized Maintenance Monitoring System (CMMS) to store and derive measurements from thermal images. GPS, compass, current, and voltage measurements embedded in image files are also accessible.

TECHNICAL SPECIFICATIONS

Features by Camera	E75	E85	E95
IR Resolution	320 x 240 (76,800 pixels)	384 x 288 (110,592 pixels)	464 x 348 (161,472 pixels)
Object Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F) Optional calibration 300°C to 1000°C (572°F to 1830°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F) 300°C to 1200°C (572°F to 2192°F)	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F) 300°C to 1500°C (572°F to 2732°F)
Time-lapse (Infrared)	No	No	10 sec to 24 hours
Laser Area Measurement	No	Yes	Yes
Spotmeter	1 in live mode	3 in live mode	3 in live mode
Area	No	3 in live mode	3 in live mode

Common Features	Exx-Series
Detector Type and Pitch	Uncooled microbolometer, 17 µm
Thermal Sensitivity/NETD	< 0.03°C @ 30°C (86°F)
Spectral Range	7.5 - 14.0 µm
Image Frequency	30 Hz
Field of View (FOV)	24° x 18° (17 mm lens), 42° x 32° (10 mm lens), 14° x 10° (29 mm lens)
F-Number	f/1.3, f/1.1
Lens Identification	Camera automatically identifies optional lenses without a factory calibration
Focus	Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual
Digital Zoom	1-4x continuous

Exx-Series cameras are backed by FLIR's industry-leading warranty

2 years: Full protection, parts, labor

5 years: Battery

10 years: Detector

LEARN MORE ABOUT EXX-SERIES CAMERAS AT WWW.FLIR.COM/EXX-ELECTRICAL

FLIR Exx-Series™

Image Presentation and Modes	
Display	4", 640 x 480 pixel touch screen LCD with auto-rotation
Digital Camera	5 MP, 53° x 41° FOV
Color Palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Image Modes	Infrared, visual, MSX®, Picture-in-Picture
Picture-in-Picture	Resizable and movable
MSX®	Embosses visual details on full resolution thermal image
UltraMax™	Super-resolution process quadruples pixel count, activated in FLIR Tools+
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 alarm, insulation alarm, measurement alarms
Color Alarm (Isotherm)	Above/below/interval/condensation/insulation
Laser Distance Measurement	Yes, on-screen
Measurement Presets	No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2
Compass, GPS	Yes; automatic GPS image tagging
METERLiNK®	Yes; several readings
Image Storage	
Storage Media	Removable SD card (8 GB)
Image File Format	Standard radiometric JPEG, 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
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	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6, IP 54 /IEC 60529; EN/UL/CSA/PSE 60950-1
Weight/Dimensions w/o Lens	1 kg (2.2 lbs), 27.8 x 11.6 x 11.3 cm (11.0 x 4.6 x 4.4 in)
Box Contents	Infrared camera with lens, battery (2 ea), battery charger with power supply, front lens and light protection, straps (hand and wrist), lanyards, lens caps (front and rear), lens cleaning cloth, 15 W3 A power supply, printed documentation, 8 GB SD card, Torx screwdriver, cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C)

PORTLAND
Corporate Headquarters
FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
PH: +1 866.477.3687

NASHUA
FLIR Systems, Inc.
9 Townsend West
Nashua, NH 03063
PH: +1 866.477.3687

CANADA
FLIR Systems, Ltd.
920 Sheldon Court
Burlington, ON L7L 5K6
Canada
PH: +1 800.613.0507

LATIN AMERICA
FLIR Systems Brasil
Av. Antonio Bardella,
320 Sorocaba,
SP 18085-852
Brasil
PH: +55 15 3238 7080

CHINA
FLIR Systems Co., Ltd
Rm 1613-16, Tower II
Grand Central Plaza 1
38 Shatin Rural
Committee Rd.
Shatin, New Territories
Hong Kong
PH: +852 2792 8955

BELGIUM
FLIR Systems
Luxemburgstraat 2
2321 Meer
Belgium
PH: +32 (0) 3665 5100

UNITED KINGDOM
FLIR Systems UK
2 Kings Hill Ave., Kings Hill
West Malling, Kent
ME19 4AQ
United Kingdom
PH +44 (0)1732 220 011

www.flir.com
NASDAQ: FLIR

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. ©2017 FLIR Systems, Inc. All rights reserved. (01/17) 16-1455

FLIR® | The World's Sixth Sense®