



E53 - Advanced Thermal Imaging

FLIR redesigned the Exx-Series from the handle up to deliver the best performance, resolution, and sensitivity of any pistol-grip hand-held thermal camera. The new E53 camera is packed with the features you need to detect the early signs of water intrusion, air leaks, and other building deficiencies before they cause serious damage.

Flir E53 camera offers:

- 43,200 point of measurement
- Our best MSX[®] enhancement
- A larger, 4" display that's 33% brighter
- A responsive new interface
- Improved organization and reporting options



Work Safer

Your job can take you up ladders and into crawl-spaces, so you need tools that can be used one-handed and worry-free. FLIR designed its new E53 camera to be tough enough to use every day, with simplified buttons and intuitive screens that allow you to focus on your work - instead of on the camera controls.

Work Smarter

The new E53 camera produces standard radiometric JPEGs that can be opened and viewed without proprietary software. Image files produced by E53 camera are supported by FLIR's Software Development Kit (ATLAS SDK), so companies can use their own software and still support read-out of thermal measurements, METERLiNK[®] data, and other important parameters embedded within the image. Current and voltage measurements embedded in image files are also accessible.

FEATURE BY CAMERA	E53
IR RESOLUTION	240 x 180 (43,200 pixels)
ULTRAMAX [®]	-
OBJECT TEMPERATURE RANGE	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1200°F)
FOCUS	Manual
TIME-LAPSE (INFRARED)	-
LASER AREA MEASUREMENT	-
LASER DISTANCE MEASUREMENT	-
MEASUREMENT PRESETS	No measurement, center spot, hot spot, cold spots, hot spot-spot*
SPOTMETER	3 in live mode
AREA	1 in live mode
PICTURE-IN-PICTURE	Centered infrared are on the visual image
DETECTOR TYPE AND PITCH	Uncooled microbolometer, 17µm
THERMAL SENSITIVITY/NETD	<0.03°C @ 30°C (86°F), 42° lens
SPECTRAL RANGE	7.5 - 14.0µm
IMAGE FREQUENCY	30Hz
FIELD OF VIEW (FOV)	42° x 32° (10mm lens), 24° x 18° (18mm lens), 14° x 10° (29mm lens)
F-NUMBER	f/1.3
LENS IDENTIFICATION	Automatic
DIGITAL ZOOM	1-4x continuous

* Hot spot to center spot Delta measurement



IMAGE PRESENTATION AND MODE		E53
DISPLAY	4, 640 x 480 pixel touch screen LCD with auto-rotation	
DIGITAL CAMERA	5 MP, 53° x 41° FOV	
COLOUR 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		E53
ACCURACY	±2°C (±3.6°F) or ±2% of reading for ambient temperature 15°C to 35°C (59°F to 95°F) an object temperature above 0°C (32°F)	
ALARMS	Moisture alarm, insulation alarm, measurement alarms	
COLOUR ALARM (ISOTHERM)	Above/below/interval/condensation/insulation	
COMPRESS, GPS	yes; automatic GPS image tagging	
METERLINK	Yes; several readings	
LASER POINTER	Yes; dedicated button	
IMAGE STORAGE		E53
STORAGE MEDIA	Removable SD card (8GB)	
IMAGE FILE FORMAT	Standard JPEG with measurement data included	
VIDEO RECORDING AND STREAMING		E53
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; MPEG over UVC or Wi-Fi	
COMMUNICATION INTERFACES	USB 2.0, Bluetooth, Wi-Fi, DisplayPort	
VIDEO-OUT	DisplayPort over USB Type-C	
ADDITIONAL DATA		E53
BATTERY TYPE	Li-on 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/DIMENSIONS	1kg (2.2 lbs), 27.8 x 11.6 x 11.3 cm (11.0 x 4.6 x 4.4 in)	
BOX CONTENT		E53
Infrared camera with lens, battery (2 ea), battery charger, front protection, straps (hand, wrist), hard transport case, lanyard, lens caps, lens cleaning cloth, power supplies, 8 GB SD card, Torx wrench, cables (USB 2.0A to USB Type-C, USB Type-C to USB Type-C, USB Type-C to HDMI)		

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

2 years: Full protection, parts, labor

10 years: Detector



Ordering Information: Part No. E53-24

In support of our policy of continuous product improvement we reserve the right to change materials and specifications without notice. Drawings, where used, are not to scale. All dimensions are in millimetres and sizes given are approximate. Where possible, technical MSDS data sheets are made available on the website. All products should be installed and used in accordance with manufacturer's instructions provided. Warning: products may be the subject of registered designs and patents. Refer to website for terms and conditions on warranty.