



## FLIR E-Series

### The New E40, E50 and E60, Now with MSX® Advanced Thermal Imaging Camera Performance

Troubleshoot more efficiently, create detailed reports easier, and share images and findings faster with FLIR's latest E-Series thermal imagers. Featuring a fresh array of imaging, communication, and productivity tools to help you get more done in a day.

**FLIR Tools Mobile Communication** – Connect an E-Series camera to smartphones and tablets with our Wi-Fi app. Stream live video so others can watch along. Import radiometric JPEGs, adjust levels, add measurement tools, then send images off in simple reports via email to expedite repair decisions.

**Superior Thermal Imaging** – Up to 76,800 pixels (320 x 240) for better long-range accuracy and the highest level of point & shoot camera IR resolution.

**MSX Thermal Image Enhancement** – See numbers, labels and other key visual details not normally apparent in a regular thermal image with an all-in-one thermal picture that instantly orients you to right where heat issues are.

**Onboard Digital Camera** – 3.1MP resolution provides clear visible light reference pictures; includes built-in LED lamp that doubles as a flashlight plus a laser pointer to mark locations.

**Large Touchscreen with Auto-Orientation** – The E-Series touchscreen provides an intuitive interface that takes full advantage of the entire 3.5" display for easy access to diagnostics tools, and measurement and other data overlays stay upright no matter how you hold the camera.

**Picture-in-Picture** – Overlay thermal images onto digital scenes for extra location documentation.

**Multiple Measurements** – Add up to 3 box areas and 3 moveable spots using the touchscreen to gather more detailed temperature information.

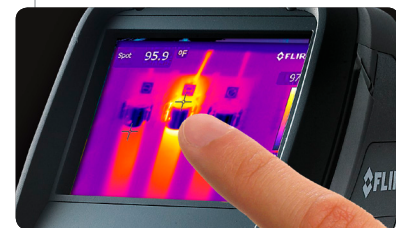
**MeterLink®** – Measure more than temperature. Send diagnostics data by Bluetooth from compatible clamp and moisture meters directly to E-Series cameras to embed extra information into thermal images as you capture them that further supports findings.

**Interchangeable Lenses and Manual Focus** – Optional wide-angle and telephoto optics let you capture more of a scene in one shot or get in closer to measure smaller, distant targets. Full focus control help you dial in the sharpest clarity and accuracy.

**Higher Temperature Range & Sensitivity** – Measure hotter-running equipment with higher 650°C (1,202°F) detection, and see subtler temperature patterns and detail with E-Series' greater sensitivity.



FLIR Tools Mobile Wi-Fi Connectivity



Large 3.5" Touchscreen



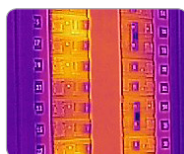
Auto-Orientation Keeps Diagnostics Overlays Upright



Visible Light Pictures  
Align with Thermal  
Images: 3.1MP Digital  
Camera, LED Lamp,  
and Laser Pointer



Large Buttons for  
Easy Glove-Handed  
Operation

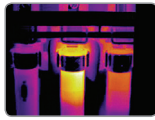


MSX Image  
Enhancement



Bluetooth® METERLiNK®  
Communication

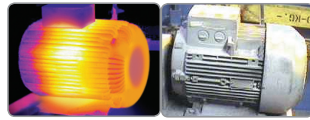
## Applications



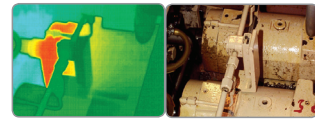
Electrical: Hot Fuses



Motor: Internal Winding Problem



Motor: Bearing Problem



## Imaging Specifications

| FEATURES                                                         | FLIR E40                                                                                                       | FLIR E50                                           | FLIR E60                                           |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| Temperature range                                                | -4 to 1202°F (-20 to 650°C)                                                                                    | -4 to 1202°F (-20 to 650°C)                        | -4 to 1202°F (-20 to 650°C)                        |
| Thermal sensitivity (N.E.T.D)                                    | <0.07°C at 30°C                                                                                                | <0.05°C at 30°C                                    | <0.05°C at 30°C                                    |
| Detector Type - Focal plane array; (FPA) uncooled microbolometer | 160 x 120 pixels                                                                                               | 240 x 180 pixels                                   | 320 x 240 pixels                                   |
| MSX® Thermal Image Enhancement                                   | Yes                                                                                                            | Yes                                                | Yes                                                |
| Picture-in-Picture (P-i-P)                                       | Fixed P-i-P                                                                                                    | Scalable P-i-P                                     | Scalable P-i-P                                     |
| MPEG 4 Video Recording                                           | Yes                                                                                                            | Yes                                                | Yes                                                |
| Video Camera w/Lamp & Laser                                      | 3.1MP/LED Lamp/Laser pointer                                                                                   | 3.1MP/LED Lamp/Laser pointer                       | 3.1MP/LED Lamp/Laser pointer                       |
| Digital Zoom                                                     | 2X Continuous                                                                                                  | 4X Continuous                                      | 4X Continuous                                      |
| Image annotation                                                 | Voice (60s)/Text Comments                                                                                      | Voice (60s)/Text Comments                          | Voice (60s)/Text Comments                          |
| Moveable Spot                                                    | 3 Spotmeters                                                                                                   | 3 Spotmeters                                       | 3 Spotmeters                                       |
| Area Box                                                         | 3 Area Boxes<br>(full image with min/max/avg)                                                                  | 3 Area Boxes<br>(full image with min/max/avg)      | 3 Area Boxes<br>(full image with min/max/avg)      |
| Delta T                                                          | Yes                                                                                                            | Yes                                                | Yes                                                |
| Data Communication Interface                                     | USB-mini, USB-A, Composite Video, Bluetooth, Wi-Fi                                                             | USB-mini, USB-A, Composite Video, Bluetooth, Wi-Fi | USB-mini, USB-A, Composite Video, Bluetooth, Wi-Fi |
| COMMON FEATURES                                                  |                                                                                                                |                                                    |                                                    |
| Frame Rate                                                       | 60Hz                                                                                                           |                                                    |                                                    |
| Field of view / Focus                                            | 25° x 19° / Manual (Minimum focus distance 1.3ft/0.4m)                                                         |                                                    |                                                    |
| Spectral range                                                   | 7.5 to 13µm                                                                                                    |                                                    |                                                    |
| Display                                                          | Built-in 3.5" color LCD                                                                                        |                                                    |                                                    |
| Image modes                                                      | Thermal, visual, MSX, and image gallery                                                                        |                                                    |                                                    |
| Image Storage                                                    | >1000 radiometric JPEG images (SD card memory)                                                                 |                                                    |                                                    |
| Laser Classification/Type                                        | Class 2/Semiconductor AlGaInP Diode Laser: 1mW/635nm (red)                                                     |                                                    |                                                    |
| Set-up controls                                                  | Mode selector, color palettes, configure image info, units, language, date and time formats, and image gallery |                                                    |                                                    |
| Measurement modes                                                | Auto hot/cold spot, Isotherm (above/below/interval)                                                            |                                                    |                                                    |
| Measurement Correction                                           | Reflected ambient temperature & emissivity correction                                                          |                                                    |                                                    |
| Battery Type/Operating Time                                      | Li-Ion/ >4 hours, Display shows battery status                                                                 |                                                    |                                                    |
| Charging system                                                  | In camera AC adapter/2 bay charging system                                                                     |                                                    |                                                    |
| Shock/Vibration/Drop / Encapsulation; Safety                     | 25G, IEC 60068-2-29/ 2G, IEC 60068-2-6/ Drop-proof 2m (6.6ft) IP54; EN/UL/CSA/PSE 60950-1                      |                                                    |                                                    |
| Dimensions/Weight                                                | 9.7x3.8x7.2" (246x97x184mm)/<1.82lbs (825g), including battery                                                 |                                                    |                                                    |

## Ordering Information

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| 64501-0101 .....     | FLIR E40 IR Camera w/MSX 160 x 120 Resolution/60Hz         |
| 64501-0101-KIT ..... | FLIR E40 w/MSX 160 x120 Resolution/60Hz with FLIR Tools +  |
| 64501-0201 .....     | FLIR E50 IR Camera w/MSX 240 x 180 Resolution/60Hz         |
| 64501-0201-KIT ..... | FLIR E50 w/MSX 240 x 180 Resolution/60Hz with FLIR Tools + |
| 64501-0302 .....     | FLIR E60 IR Camera w/MSX 320 x 240 Resolution/60Hz         |
| 64501-0302-KIT ..... | FLIR E60 w/MSX 320 x 240 Resolution/60Hz with FLIR Tools + |

### ACCESSORIES

|               |                                                            |
|---------------|------------------------------------------------------------|
| T197752 ..... | Li-Ion Rechargeable Battery                                |
| T910814 ..... | AC Adapter Charger (110-240V, U.S. Plug)                   |
| 1910490 ..... | Cigarette Lighter Adapter Kit, 12VDC (1.2m cable)          |
| T198125 ..... | 2-Bay Battery Charger including Power Supply (multi plugs) |
| T197771 ..... | Bluetooth® Headset                                         |
| T127648 ..... | FLIR Tools+ (Scratchcard) 2 Users                          |
| 1196961 ..... | 15° Telephoto Lens                                         |
| 1196960 ..... | 45° Wide Angle Lens                                        |
| T197926 ..... | Tripod adapter                                             |
| T127100 ..... | Sunshield                                                  |
| T911087 ..... | Pouch                                                      |



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10-Year Detector  
Protection  
5-Year Battery  
2-Year Parts & Labor