

Imaging Specifications



| Specifications | Point & Shoot | | | | Performance | | | High-Performance | | | | |
|---|--------------------------------|--|--|-----------------------|--|-----------------------|-----------------------|--|---|--|--|----------|
| | E4 | E5 | E6 | E8 | E40/E40bx | E50/E50bx | E60/E60bx | T420/T420bx | T440/T440bx | T620/T620bx | T640/640bx | |
| Accuracy | ±2% or 2°C | | | | ±2% or 2°C | | | ±2% or 2°C | | | | |
| IR Pixel Resolution | 4,800 (80 x 60) | 10,800 (120 x 90) | 19,200 (160 x 120) | 76,800 (320 x 240) | 19,200 (160 x 120) | 43,200 (240 x 180) | 76,800 (320 x 240) | 76,800 (320 x 240) | | 307,200 (640 x 480) | | |
| Thermal Sensitivity | <0.15°C | <0.10°C | <0.06°C | <0.06°C | <0.07°C / <0.045°C | <0.05°C / <0.045°C | | <0.045°C | | <0.04°C | <0.035°C | |
| Temperature Range | -4° F to 482°F (-20° to 250°C) | | | | -4°F to 1,202°F (-20°C to 650°C) bx: -4°F to 248°F (-20°C to 120°C) | | | -4°F to 1,202°F (-20°C to 650°C) Optional to 2,192°F (1,200°C) bx: -4°F to 662°F (-20°C to 350°C) | -4°F to 2,192°F (-20°C to 1,200°C) bx: -4°F to 1202°F (-20°C to 650°C) | -40°F to 1,202°F (-40°C to 650°C) Optional: to 3,632°F (2,000°C) bx: -40°F to 1202°F (-40°C to 650°C) | -40°F to 3,632°F (-40°C to 2,000°C) bx: -40°F to 1,202°F (-40°C to 650°C) | |
| Display Size/Format | 3.0"/Landscape | | | | 3.5"/Landscape | | | 3.5"/Landscape | | 4.3"/Landscape (Widescreen) | | |
| Auto Orientation | — | — | — | — | • | • | • | — | — | — | — | |
| MSX® Thermal Image Enhancement | • | • | • | • | • | • | • | • | • | • | • | |
| Viewfinder | — | — | — | — | — | — | — | — | — | — | • | |
| Measurement Modes | Spot (center) mode | 2 modes: 1 Spot (center); 1 Area Box (Min/Max) | 3 modes: 1 Spot (center); 1 Area Box (Min/Max); Isotherm (above/below) | | 5 modes: 3 Spots; 3 Area Boxes (Min/Max); Color Alarm – blue below or red above set Temp.; Auto hot/cold spot; Delta T | | | 6 modes: 5 Spotmeters, 5 Area Boxes, Isotherm, Auto hot/cold spot, Delta T and 1 live line profile | | 6 modes: 10 Spots, 5 Area Boxes/Circles, Isotherm, Auto hot/cold spot, Delta T and 1 live line profile | | |
| Spot mode | Center/Fixed | | | | 3 moveable | | | 5 moveable | | 10 moveable | | |
| Frame Rate | 9 Hz | | | | 60Hz | | | 60 Hz | | 30 Hz | | |
| Field of View | 45° x 34° | | | | 25° x 19° | | | 25° x 19° | | | | |
| Optional Lenses | — | — | — | — | 2: 15° Telephoto; 45° Wide Angle | | | 6: 6°, 15° Tele, 45° Wide, 90°; Close up: 100, 50 µm | | 6: 7° & 15° Tele, 45° Wide; Close-up: 80, 100, 50µm | | |
| Focus | Focus free | | | | Manual | | | Manual & Automatic | | | | |
| Continuous Auto Focus | — | — | — | — | — | — | — | — | — | — | • | |
| Min. Focus Distance | 1.6 ft. (0.5m) | | | | 1.31 ft (0.4 m) | | | 1.31 ft (0.4 m) | | 0.82 ft (0.25 m) | | |
| Radiometric JPEG via USB | • | • | • | • | • | • | • | • | • | • | • | |
| Radiometric JPEG to SD Card | — | — | — | — | • | • | • | • | • | • | • | |
| MPEG4 to SD (non-radiometric IR) | — | — | — | — | • | • | • | • | • | • | • | |
| Thermal color palettes | 3: Iron, Rainbow, and Gray | | | | 7: Arctic, White hot, Black hot, Iron, Lava, Rainbow, and Rainbow High Contrast | | | 6: Arctic, Gray, Iron, Lava, Rainbow, and Rainbow High Contrast | | | | |
| FLIR Tools for PC and Mac | • | • | • | • | • | • | • | • | • | • | • | |
| Battery Operating Time | ~4 hrs | | | | >4hrs | | | >4hrs | | >2.5 hrs | | >2.5 hrs |
| Built-in Digital Camera | 640 x 480 | | | | 3.1 MP | | | 3.1 MP | | 5 MP | | |
| Built-in Illuminator LED | — | — | — | — | • | • | • | • | • | • | • | |
| Touchscreen | — | — | — | — | • | • | • | • | • | • | • | |
| Digital Zoom | — | — | — | — | 2x | 4x | | 4x | 8x | 4x | 8x | |
| Insulation Alarm | — | — | — | — | bx | bx | bx | bx | bx | bx | bx | |
| Humidity Alarm | — | — | — | — | bx | bx | bx | bx | bx | bx | bx | |
| MeterLink® connectivity | — | — | — | — | • | • | • | • | • | • | • | |
| Laser Pointer + Laser Locator (on IR image) | — | — | — | — | • | • | • | • | • | • | • | |
| Compass | — | — | — | — | — | — | — | • | • | • | • | |
| GPS | — | — | — | — | — | — | — | • | • | • | • | |
| IR Window Correction | — | — | — | — | • | • | • | • | • | • | • | |
| Delta T | — | — | — | — | • | • | • | • | • | • | • | |
| Picture in Picture | — | — | Fixed PIP | Fixed PIP | Fixed PIP | Scalable PIP | | Scalable & Moveable | | | | |
| Thermal/Visual Fusion | — | — | — | — | — | — | — | • | • | • | • | |
| Onscreen Sketching | — | — | — | — | — | — | — | • | • | • | • | |
| Sketch on IR/Visual Image | — | — | — | — | — | — | — | — | • | — | • | |
| Voice/Text Annotation | — | — | — | — | • | • | • | • | • | • | • | |
| FLIR Tools Mobile Wi-Fi app | — | — | — | — | • | • | • | • | • | • | • | |
| Streaming Video via Wi-Fi app | — | — | — | — | • | • | • | • | • | • | • | |
| Remote Control via Wi-Fi app | — | — | — | — | — | — | — | • | • | • | • | |
| Drop (2 meter/6.6 feet) | • | • | • | • | • | • | • | — | — | — | — | |
| Weight (including battery) | 1.27 lbs (0.575 kg) | | | | 1.94 lbs (0.88 kg) | | | 1.94 lbs (0.88 kg) | | 2.87 lbs (1.3 kg) | | |