



High-Performance Thermal Camera

FLIR T800-Series

FLIR T800-Series thermal imaging cameras provide a noncontact inspection method with a tilting optic design, making it easy to safely and comfortably assess the condition of critical electrical and mechanical equipment. Advanced features such as 1-Touch Level/Span contrast enhancement and sharp laser-assisted autofocus ensure the camera takes accurate temperature measurements every time. Plus, the T865 offers temperature measurement accuracy as good as ±1°C / ±1% to help professionals make decisions quickly. T800-Series cameras are compatible with FLIR AutoCal™ interchangeable lenses, for simplified transition from scanning wide areas with the 42° lens to inspecting distant targets with the 6° telephoto lens. Adding a FLIR T800-Series camera to a condition monitoring/predictive maintenance program can help reduce maintenance costs, improve system efficiency and reliability, and prevent lost production and downtime due to outages.



IMPROVE WORKFLOW **EFFICIENCIES**

Collect and manage critical data quickly and easily

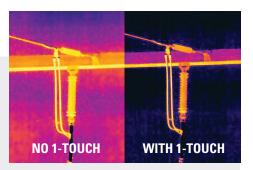
- Develop and download routes to the camera via FLIR Route Creator* for streamlined inspections of critical assets
- · Acquire temperature data and thermal and visual imagery in a logical sequence for faster preventative/predictive maintenance procedures
- · Automate data management and reporting through easy transfer of organized files to FLIR Thermal Studio*



WORK SAFELY AND COMFORTABLY

Assess the state of equipment from a safe distance, at any angle, or in any lighting condition

- Use the camera in any environment indoors or out - with a large, vibrant 4-inch color LCD display and an integrated eyepiece viewfinder for working in bright sunlight
- Image targets overhead or down low without strain thanks to the 180° rotating optical block and ergonomic design
- Accurately measure small targets over long distances or in large scenes by pairing the high-resolution IR sensor with the optional 6° telephoto lens



MAKE CRITICAL DECISIONS QUICKLY

Save time and share data faster to increase in-field efficiency

- Ensure precision measurement with laserassisted autofocus, 1-Touch Level/Span, and exceptional temperature accuracy†
- · Avoid diagnostic errors with industry-leading image clarity from FLIR Vision Processing™, combining MSX®, UltraMax®, and proprietary adaptive filtering algorithms
- · Optimize workflows with reporting features such as built-in voice annotation, customizable work folders, and Wi-Fi sync to FLIR mobile apps



SPECIFICATIONS

| Imaging and Optical Data | T840 | T860 | T865 |
|---|---|--|--|
| IR Resolution | 464 × 348 (161,472 pixels, 645,888 with UltraMax®) | 640 × 480 (307,200 pixels, 1,228,800 with UltraMax®) | 640 × 480 (307,200 pixels, 1,228,800 with UltraMax®) |
| Detector Pitch | 17 μm | 12 µm | 12 μm |
| Object Temperature Range | -20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 1500°C (572°F to 2732°F) | -20°C to 120°C (-4°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 2000°C (572°F to 3632°F) | -40°C to 120°C (-40°F to 248°F); 0°C to 650°C (32°F to 1202°F); 300°C to 2000°C (572°F to 3632°F |
| Digital Zoom | 1-6× continuous | 1-8× continuous | 1-8× continuous |
| Macro Mode (24° lens option) | 71 µm min. focus distance | 50 µm min. focus distance | 50 µm min. focus distance |
| Spotmeter and Area | 3 each in live mode | 3 each in live mode | 10 and 5 in live mode |
| Accuracy | ±2°C (±3.6°F): -20°C to 100°C (-4°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 1500°C (572°F to 2732°F) | ±2°C (±3.6°F): -20°C to 100°C (-4°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°F); ±3%: 1800°C to 2000°C to 2000°C (572°F to 3632°F); ±3%: 1800°C to 3632°F) with 42° lens | ±1°C (±1.8°F): 5°C to 100°C (41°F to 212°F) ±1%: 100°F to 120°C (212°F to 248°F); ±2°C (±3.6°F): -40°C to 100°C (-40°F to 212°F); ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°F); ±3%: 1800°C to 3632°F) with 42° lens |
| Detector Data | | | |
| Detector Type and Pitch | Uncooled microbolometer | | |
| Thermal Sensitivity/ NETD | <30 mK @ 30°C (42° lens) | | |
| Spectral Range | 7.5 to 14.0 µm | | |
| Image Frequency | 30 Hz | | |
| Lens Identification | Automatic | | |
| F-number | f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens), f/1.35 (6° lens) | | |
| Focus | Continuous with laser distance meter (LDM), One-shot LDM, One-shot contrast, manual | | |
| Minimum Focus Distance | 42° lens: 0.15 m/0.49 ft, 24° lens: 0.15 m/0.49 ft, 14° lens: 1.0 m/3.28 ft, 6° lens: 5.0 m/16.4 ft | | |
| Programmable Buttons | | 2 | |
| Image Presentation | | | |
| Display | 4-inch, 640 × 480 pixel touchscreen LCD with auto-rotation | | |
| Digital Camera | 5 MP with built-in LED photo/video lamp | | |
| Color Palettes | Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava | | |
| Image Modes | Infrared, visual, MSX®, Picture-in-picture | | |
| ago iviouos | Resizable and movable | | |
| Picture-in-Picture | | | 6. |
| | Activated in mer | nu and processed in FLIR re | porting software |
| Picture-in-Picture | | nu and processed in FLIR re | porting software |
| Picture-in-Picture UltraMax® | alysis No measurer | nu and processed in FLIR re ment, Center spot, Hot spo JserPreset 1, User Preset 2 | ot, Cold spot, |
| Picture-in-Picture UltraMax® Measurement and Ana | alysis No measurer | ment, Center spot, Hot spo | ot, Cold spot, |
| Picture-in-Picture UltraMax® Measurement and An: Measurement Presets | Alysis No measurer L | ment, Center spot, Hot spo JserPreset 1, User Preset 2 | ot, Cold spot, 2 |

| FLIR Inspection Route | Enabled in the camera | |
|---|---|--|
| Voice | 60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth® | |
| Text | Predefined list or touchscreen keyboard | |
| Image Sketch | Infrared images only, from touchscreen | |
| GPS | Automatic image tagging | |
| METERLINK® | Yes; connects to METERLINK-enabled FLIR meters | |
| Image Storage | | |
| Storage Media | Removable SD card | |
| Image File Format | Standard JPEG with measurement data included | |
| Time Lapse (Infrared) | 10 sec to 24 hrs | |
| Video Recording and Stre | eaming | |
| Radiometric IR Video Recording | Real-time radiometric recording (.csq) | |
| Non-radiometric IR or Visual Video | H.264 to memory card | |
| Radiometric IR Video Streaming | Compressed, over UVC | |
| Non-radiometric IR Video Streaming | H.264, MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi | |
| Communication Interfaces | USB 2.0, Bluetooth, Wi-Fi, DisplayPort | |
| Video Out | DisplayPort | |
| Additional Data | | |
| Languages | 21 | |
| Battery Type | Li-ion battery, charged in camera or on separate charger | |
| Battery Operation | Approximately 4 hours at 25°C (77°F) | |
| Operating Temperature Range | -15°C to 50°C (5°F to 122°F) | |
| Shock/Vibration/ Encapsulation | 25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6) / IP54 EN/UL/CSA/ PSE 60950-1 | |
| Safety | EN/UL/CSA/PSE 60950-1 | |
| Weight (including battery) | 1.4 kg (3.1 lb) | |
| Size (I \times w \times h, lens vertical) | 164.3 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in) | |
| Box Contents | | |
| Package Contents | Infrared camera with lens, small viewfinder eyecup, 2-rechargeable batteries, battery charger, hard transport case, lanyards, front lens cap, power supplies, printed documentation, SD card (8 GB), cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C tuSB Type-C), License card: FLIR Thermal Studio Pro 4 subscription) + FLIR Route Creator Plugin for Thermal Studio Pro | |

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