

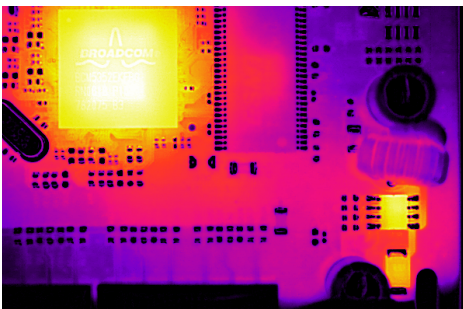


High-Performance Science Handheld Infrared Camera

FLIR T800-Series



FLIR T800-Series handheld infrared cameras provide ultimate flexibility and portability for research and science applications in multiple industries including electronics, aerospace, green energy, university research, military testing, and government labs. High-performance features including FLIR UltraMax®, MSX® (Multi-spectral Dynamic Imaging), and optional Macro Mode provide exceptional image quality and unmatched measurement capabilities. Robust on-board analysis and the ability to record fully radiometric movie files to a removable SD card allow users to take meaningful thermal data in nearly any environment or testing scenario. Users can expand data analysis capabilities with powerful FLIR Research Studio* software running on a PC, Mac, or Linux. With a streamlined, intuitive user interface and unique feature set, users at all levels can effortlessly record and evaluate thermal data from multiple FLIR cameras and recorded sources simultaneously.

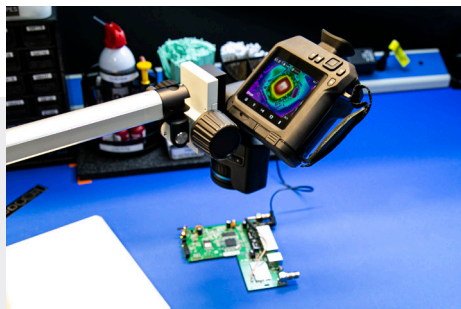


SUPERIOR MEASUREMENT CAPABILITIES

Accurately measure a wide range of temperatures and maximize the number of pixels on targets regardless of size or distance from the camera

- Acquire reliable temperature data with exceptional measurement accuracy†
- Produce crisp, vibrant imagery with FLIR MSX, which extracts scene details from the built-in visual camera and embosses them onto the full thermal image; and UltraMax, which enhances images up to 1.2 MP thermal resolution
- Perform wide-angle and macro imaging to measure small areas accurately without switching lenses using FLIR Macro Mode; or resolve temperatures on the smallest components with an optional 2x macro lens

†Accuracy as good as ±1% / ±1% with T865, see specs for more details



ULTIMATE FLEXIBILITY AND PORTABILITY

Collect meaningful thermal data in nearly any situation with flexible connectivity - whether the camera is handheld or mounted

- Record radiometric images and movie files directly to a removable SD-card (without the need to be connected to a PC) using on-board CSQ file recording
- Stream fully radiometric data to FLIR Research Studio* software via USB-C, and analyze and share thermal data easily
- Connect wirelessly to mobile devices using built-in Wi-Fi



SAVE TIME AND EFFORT

Eliminate the need for complex test set-ups when performing thermal analysis and start testing sooner

- Acquire compelling thermal data using the intuitive interface and icon-based touchscreen
- Record both thermal and visible images as well as infrared movie sequences
- Reduce the time and effort needed to learn new programs and start testing quicker with FLIR Research Studio's intuitive software platform

*A free 30-day trial of FLIR Research Studio software can be downloaded from the FLIR Technical Support Center (<https://flir.custhelp.com/>). Please contact a FLIR representative for pricing and purchase options.

SPECIFICATIONS

| Imaging and Optical Data | | T840 | T865 | Annotations | |
|---------------------------------|--|--|---|--------------------------------------|---|
| IR Resolution | | 640 × 348 (161,472 pixels, 645,888 with UltraMax®) | 640 × 480 (307,200 pixels, 1,228,800 with UltraMax®) | Voice | 60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth® |
| Detector Pitch | | 17 µm | 12 µm | Text | Predefined list or touchscreen keyboard |
| 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) | -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) | Image Sketch | Infrared images only, from touchscreen |
| Digital Zoom | | 1-6× continuous | 1-8× continuous | GPS | Automatic image tagging |
| Macro Mode (24° lens option) | | 71 µm min. focus distance | 50 µm at near focus distance of 60 mm | METERLiNK® | Yes; connects to METERLiNK-enabled FLIR meters |
| Spotmeter and Area | | 3 each in live mode | 10 and 5 in live mode | Image Storage | |
| 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) | ±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 2000°C (3272°F to 3632°F) with 42° lens | Storage Media | Removable SD card |
| Detector Data | | | | Image File Format | Standard JPEG with measurement data included |
| Detector Type and Pitch | | Uncooled microbolometer | | Time Lapse (Infrared) | 10 sec to 24 hrs |
| Thermal Sensitivity/NETD | | <30 mK @ 30°C (42° lens) | | Video Recording and Streaming | |
| Spectral Range | | 7.5 to 14.0 µm | | Radiometric IR Video Recording | Real-time radiometric recording (.csq) |
| Image Frequency | | 30 Hz | | Non-radiometric IR or Visual Video | H.264 to memory card |
| Lens Identification | | Automatic | | Radiometric IR Video Streaming | Compressed, over UVC |
| F-number | | f/1.1 (42° lens), f/1.3 (24° lens), f/1.5 (14° lens), f/1.35 (6° lens) | | Non-radiometric IR Video Streaming | H.264, MPEG-4 over Wi-Fi; MJPEG over UVC or Wi-Fi |
| Focus | | Continuous with laser distance meter (LDM), One-shot LDM, One-shot contrast, manual | | Communication Interfaces | USB 2.0, Bluetooth, Wi-Fi, DisplayPort |
| 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, 2x macro lens: 18 mm/0.059 ft | | Video Out | DisplayPort |
| Programmable Buttons | | 2 | | Additional Data | |
| Image Presentation | | | | Languages | 21 |
| Display | | 4-inch, 640 × 480 pixel touchscreen LCD with auto-rotation | | Battery Type | Li-ion battery, charged in camera or on separate charger |
| Digital Camera | | 5 MP with built-in LED photo/video lamp | | Battery Operation | Approximately 4 hours at 25°C (77°F) |
| Color Palettes | | Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava | | Operating Temperature Range | -15°C to 50°C (5°F to 122°F) |
| Image Modes | | Infrared, visual, MSX®, Picture-in-picture | | Shock/Vibration/Encapsulation | 25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6) / IP54 |
| Picture-in-Picture | | Resizable and movable | | Safety | EN/UL/CSA/PSE 60950-1 |
| UltraMax® | | Activated in menu and processed in FLIR reporting software | | Weight (including battery) | 1.4 kg (3.1 lb) |
| Measurement and Analysis | | | | Size (l × w × h, lens vertical) | 164.3 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in) |
| Measurement Presets | | No measurement, Center spot, Hot spot, Cold spot, User Preset 1, User Preset 2 | | Box Contents | |
| Laser Pointer | | Yes | | 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 to USB Type-C) |
| Laser Distance Meter | | Yes; dedicated button, displays distance on-screen | | | |
| On-screen Area Measurement | | Yes; calculates area inside measurement box in m² or ft² | | | |
| Compatible Software | | FLIR Research Studio, MathWorks® MATLAB® and Simulink®, FLIR Thermal Studio, FLIR Atlas SDK | | | |



The World's Sixth Sense®