



High-Performance Thermal Camera with Viewfinder

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.

www.flir.com/T-Series



IMPROVE WORKFLOW EFFICIENCIES

Collect and manage critical data quickly and easily

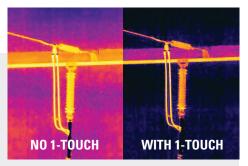
- Develop and download routes to the camera via FLIR Route Creator* for streamlined inspections of critical assets
- Acquire temperature data and thermal and visual imagery in a logical sequence for faster preventative/predictive maintenance procedures
- Automate data management and reporting through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

*All new purchases include a three-month trial of FLIR Thermal Studio Pro and the FLIR Route Creator plugin. At the end of the trial period, users who choose not to purchase a full-year subscription will be transitioned to FLIR Thermal

†Accuracy as good as $\pm 1^{\circ}\text{C}\,/\,\pm 1\%$ with T865, see specs for more detail

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 000°C (3272°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 2000°C (3272°F 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		
Picture-in-Picture	Resizable and movable		
UltraMax®	Activated in mer	nu and processed in FLIR re	porting software
Measurement and An	alysis		
Measurement Presets	No measurement, Center spot, Hot spot, Cold spot, UserPreset 1, User Preset 2		
Laser Pointer	Yes		
Laser Distance Meter	Yes; dedicated button, displays distance on-screen		
On-screen Area Measurement	Yes; calculates	area inside measurement	box in m² or ft²

Annotations			
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 to USB Type-C), License card: FLIR Thermal Studio Pro (3-month subscription) + FLIR Route Creator Plugin for Thermal Studio Pro*		

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com



The World's Sixth Sense®

