FLIR®

High-Performance Thermal Camera with Viewfinder

FLIR T800-Series

FLIR T800-Series thermal imaging cameras provide a non-contact 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

NO 1-TOUCH   **WITH 1-TOUCH**

IMPROVE WORKFLOW EFFICIENCIES
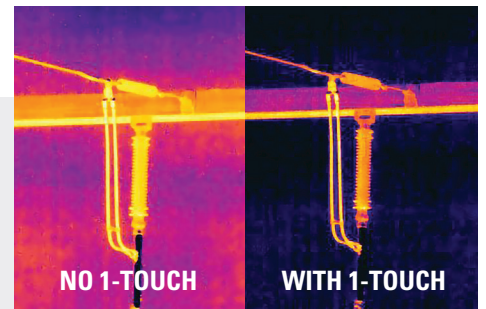Collect and manage critical data quickly and easily

- 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 laser-assisted 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 Studio Starter.

†Accuracy as good as ±1°C / ±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 (3272°F 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 menu and processed in FLIR reporting software

Measurement and Analysis

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 Streaming

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 (l × w × 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

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