TELEDYNE FLIR

FLIR T800-SERIES

High-Performance Handheld Infrared Cameras

NO 1-TOUCH   WITH 1-TOUCH
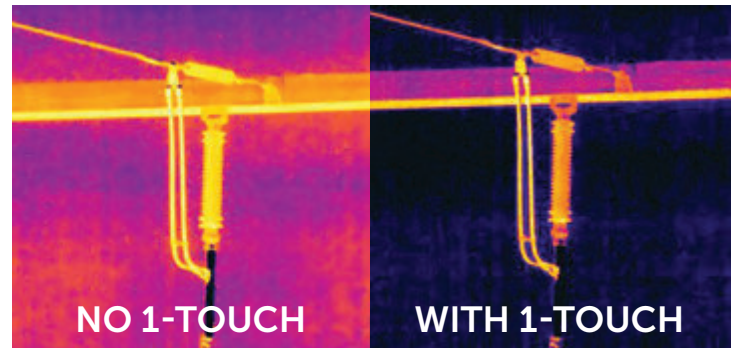
FLIR T800-Series thermal imaging cameras are powerful, ergonomic non-contact inspection tools. The 180° tilting optic design makes it comfortable, safe, and easy to assess the condition of critical electrical and mechanical equipment all day long. With advanced features including unmatched temperature measurements down to -40°C, accuracy as good as ±1°C / ±1%, 1-Touch Level/Span contrast enhancement, and laser-assisted autofocus, you'll get highly accurate temperature measurements every time. Pair any T800-Series camera with a FLIR FlexView™ dual field-of-view lens for the convenience to instantly switch from wide-area to telephoto scanning; or combine a 6° FOV IR lens with the T865 to perform inspections on small targets from long distances. With the on-board Inspection Route system, you'll be able to record temperature data and imagery in a logical sequence for faster troubleshooting and repair.

IMPROVE WORKFLOW EFFICIENCIES

Collect and manage critical data quickly and easily

- Change from wide area scanning to telephoto instantly with the FlexView dual field-of-view lens

- Develop inspection routes in FLIR Thermal Studio Pro with FLIR Route Creator* and upload them to the camera for streamlined inspections of critical assets

- Acquire temperature data and thermal and visual imagery in a logical sequence for faster preventative/predictive maintenance procedures

- Upload directly and securely to FLIR Ignite cloud and automate data management and reporting through easy transfer of organized files to FLIR Thermal Studio Pro

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% with T865, see specs for more details

SPECIFICATIONS

Features By Camera	T840	T865
IR Resolution	464 × 348 (161,472 pixels; 645,888 with UltraMax)	640 × 480 (307,200 pixels; 1,228,800 with UltraMax)
Detector Pitch	17 µm	12 µm
Object Temperature Range	-20 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)
Digital Zoom	1-6x continuous	1-8x continuous
Macro Mode (24° lens option)	71 µm min. focus distance	50 µm min. focus distance
Spotmeter and Area	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 to1500°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

Detector Data

Detector Type and Pitch	Uncooled microbolometer
Thermal Sensitivity/NETD	<30 mK @ 30°C (42° lens)
Spectral Range	7.5 - 14.0 µm
Image Frequency	30 Hz
Lens Identification	Automatic
F-Number	f/13.5 (6° lens), f/1.5 (14° lens), f/1.3 (24° lens), f/1.1 (42° lens), /1.3 (80° lens), f/1.3/1.3 (24°/14° dual field-of-view lens), f/1.2/1.2 (42°/24° dual field-of-view lens)
Focus	Continuous with laser distance meter (LDM), one-shot LDM, one-shot contrast, manual
Thermal Lens Options	14°, 24°, 42°, 80°, FlexView® 24°/14°, and FlexView® 42°/24°
Programmable Buttons	2

Image Presentation and Modes

Display	4", 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, User Preset 1, User Preset 2
Laser Pointer	Yes
Laser Distance Meter	Yes; dedicated button, displays distance on-screen
Lens Protection	Yes, industrial protective lens window optional accessory
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
METERLiNK®	Yes
GPS	Automatic image tagging

Communication & Connections

Cloud Services (via Wi-Fi)	FLIR Ignite for direct, secure image uploading, organizing, storage, and sharing (required firmware available)
METERLiNK (via Bluetooth)	Wireless connection to FLIR meters with METERLiNK

Image Storage

Storage	Removable SD card; FLIR Ignite cloud uploading
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 Streaming	Compressed, over UVC
Non-Radiometric IR Video Streaming	H.264 or 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 Operating Time	Approx. 4 hours at 25°C (77°F) ambient temperature and typical use
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)
Shock/Vibration Encapsulation; Safety	25 g / IEC 60068-2-27, 2 g / IEC 60068-2-6 / IP 54; EN/UL/CSA/PSE 60950-1
Weight (including battery)	1.4 kg (3.1 lbs)
Size (l×w×h, lens vertical)	164 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in)

Box Contents

Packaging	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 (8GB), 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.

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