

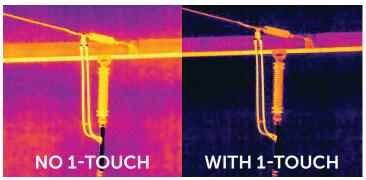
FLIR T800-SERIES

High-Performance Handheld Infrared Cameras



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.





www.flir.com/T-Series

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)	-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	1-6x 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/1.1 (42° lens), f/1.3 (24° lens), f/ f/1.3/1.3 (14°/24° dual field-of-vie	
Focus	Continuous with laser distance me shot contrast, manual	eter (LDM), one-shot LDM, one-
Thermal Lens Options	6°, 14°, 24°, 42°, Dual FOV (14° + Macro Lens and Macro Mode opti	
Programmable Buttons	2	
Image Presentation and	Modes	
Display	4", 640 × 480 pixel touchscreen LO	CD with auto-rotation
Digital Camera	5 MP with built-in LED photo/vide	o lamp
Color Palettes	Iron, Rainbow, Rainbow HC, White	e 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 Analy	sis	
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 di	stance on-screen
Lens Protection	Yes, industrial protective lens win	dow optional accessory
On-screen Area Measurement	Yes; calculates area inside measu	rement box in m ² or ft ²

Specifications are subject to change without notice.	
For the most un-to-date specs, go to www flir com/T-Series	

For more information contact: Sales@TeledyneFLIR.com

or to find your local support number, visit: flir.com/contactsupport

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 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 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*		

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited.

For assistance with confirming the Jurisdiction & Classification of Teledyne FLIR, LLC products, please contact exportquestions@flir.com.

©2022 Teledyne FLIR, LLC. All rights reserved.



Revised 06/13/22 TSeries_Datasheet-LTR 22-0000

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Teledyne FLIR:

FLIR T840 DFOV FLIR T865 DFOV