



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*

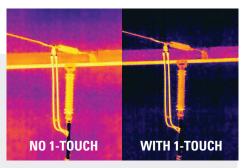
*All new purchases include a three-month trial of FLIR Thermal Studio Pro and the FLIR Route Creator plugin. At the end of the trial period, users who choose not purchase a full-year subscription will be transitioned to FLIR Thermal Studio Starter.



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

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

SPECIFICATIONS

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Imaging and Optical Data	T840	T865
Object Temperature Range	IR Resolution		
Range	Detector Pitch	17 μm	12 µm
Macro Mode (24° lens option) Spotmeter and Area Accuracy \$\frac{\pmath{\pmath{\colored}}{\pmath{\colored}}}{\pmath{\colored}}\$ \$2°C (\pmath{\pmath{\colored}}{\pmath{\colored}}\$) = 10 and 5 in live mode Accuracy \$\frac{\pmath{\pmath{\colored}}{\pmath{\colored}}}{\pmath{\colored}}\$ \$\frac{\pmath{\colored}}{\pmath{\colored}}\$ \$\		0°C to 650° (32°F to 1202°F);	
Spotmeter and Area 3 each in live mode ±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 1202°F), 300°C to 1500°C (572°F to 212°F), ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 1500°C (572°F to 212°F) ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°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) ±3%: 1800°C to 2000°C (42° lens) to 2000°C	Digital Zoom	1-6× continuous	1-8× continuous
\$\frac{\curacy}{\cupacture{\cup	,	71 µm min. focus distance	50 μm min. focus distance
(.4°F to 212°F), ±2%: 100°C to 650°C (212°F to 120°F), ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 1500°C (572°F to 2732°F) ±1%: 100°C to 650°C (212°F to 240°F to 2732°F) ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°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 (572°F to 3632°F) ±3%: 1800°C to 2000°C (3272°F to 3632°F) ±43%: 1800°C to 2000°C (42° lens	Spotmeter and Area	3 each in live mode	10 and 5 in live mode
Detector Type and Pitch Thermal Sensitivity/ NETD Spectral Range 7.5 to 14.0 µm Image Frequency 130 Hz Lens Identification F-number Focus Continuous with laser distance meter (LDM), One-shot LDM, One-shot contrast, manual Minimum Focus Distance Frogrammable Buttons Z Image Presentation Display 4-inch, 640 × 480 pixel touchscreen LCD with auto-rotation Digital Camera Color Palettes Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava Image Modes Infrared, visual, MSX®, Picture-in-picture Picture-in-Picture UltraMax® Activated in menu and processed in FLIR reporting software Measurement Presets No measurement, Center spot, Hot spot, Cold spot, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Ves; dedicated button, displays distance on-screen On-screen Area Ves; calculates area inside measurement box in m² or ft²	Accuracy	(-4°F to 212°F), ±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 1500°C (572°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
Thermal Sensitivity/ NETD Spectral Range 7.5 to 14.0 µm Image Frequency 30 Hz Lens Identification 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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	Detector Data		
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Image Frequency Lens Identification 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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²		<30 mK @ 30°C (42° lens)	
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 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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	Spectral Range	7.5 to 14.0 µm	
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 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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	Image Frequency	30 Hz	
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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²		Automatic	
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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	F-number		
Distance 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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	Focus		
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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²			
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, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter Ves; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	Programmable Buttons		2
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 On-screen Area Yes; calculates area inside measurement box in m² or ft²	Image Presentation		
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 On-screen Area Yes; calculates area inside measurement box in m² or ft²	Display	4-inch, 640×480 pixel touchscreen LCD with auto-rotation	
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 On-screen Area Yes; calculates area inside measurement box in m² or ft²	Digital Camera	5 MP with built-in LED photo/video lamp	
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 Ves; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	Color Palettes	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava	
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 On-screen Area Yes; calculates area inside measurement box in m² or ft²	Image Modes	Infrared, visual, MSX®, Picture-in-picture	
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 On-screen Area Yes; calculates area inside measurement box in m² or ft²		Resizable and movable	
Measurement Presets No measurement, Center spot, Hot spot, Cold spot, User Preset 1, User Preset 2 Laser Pointer Yes Laser Distance Meter On-screen Area No measurement, Center spot, Hot spot, Cold spot, User Preset 1, User Preset 2 Yes Yes; dedicated button, displays distance on-screen	UltraMax®	Activated in menu and processed in FLIR reporting software	
User Preset 1, User Preset 2 Laser Pointer Laser Distance Meter On-screen Area User Preset 2 Yes Yes Yes Yes; dedicated button, displays distance on-screen Yes; calculates area inside measurement box in m² or ft²	Measurement and An	alysis	
Laser Distance Meter Yes; dedicated button, displays distance on-screen On-screen Area Yes; calculates area inside measurement box in m² or ft²	Measurement Presets		
On-screen Area Yes; calculates area inside measurement box in m² or ft²	Laser Pointer	Yes	
	Laser Distance Meter	Yes; dedicated button, displays distance on-screen	
		Yes; calculates area inside measurement box in m² or ft²	

LIR Inspection Route	Enabled in the camera	
/oice	60 sec. recording added to still images or video via built-in mic (has speaker) or via Bluetooth®	
ext	Predefined list or touchscreen keyboard	
mage Sketch	Infrared images only, from touchscreen	
GPS .	Automatic image tagging	
METERLINK®	Yes; connects to METERLINK-enabled FLIR meters	
mage Storage		
torage Media	Removable SD card	
mage File Format	Standard JPEG with measurement data included	
ime Lapse (Infrared)	10 sec to 24 hrs	
ideo Recording and Stre	eaming	
Radiometric IR Video Recording	Real-time radiometric recording (.csq)	
Non-radiometric IR or /isual 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	
'ideo Out	DisplayPort	
Additional Data		
anguages	21	
Battery Type	Li-ion battery, charged in camera or on separate charger	
Battery Operation	Approximately 4 hours at 25°C (77°F)	
perating Temperature lange	-15°C to 50°C (5°F to 122°F)	
shock/Vibration/ incapsulation	25 g (IEC 60068-2-27) / 2 g (IEC 60068-2-6) / IP54	
Safety	EN/UL/CSA/PSE 60950-1	
Veight (including battery)	1.4 kg (3.1 lb)	
ize (I × w × h, lens vertical)	164.3 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in)	
Box Contents		
'ackage Contents	Infrared camera with lens, small viewfinder eyecup, 2 rechargeal batteries, battery charger, hard transport case, lanyards, from lens cap, power supplies, printed documentation, SD card (8 G cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type to USB Type-C), License card: FLIR Thermal Studio Pro (3-mor 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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