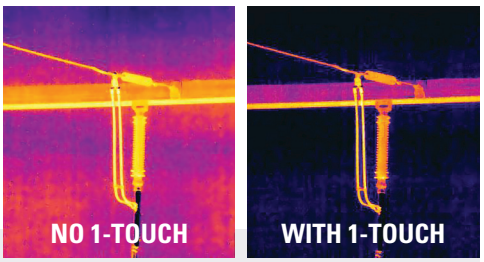
FLIR

THERMAL IMAGING CAMERA WITH VIEWFINDER

FLIR T800-Series™

The FLIR T800-Series is the new standard in predictive/preventant maintenance tools for utility, electro-mechanical, manufacturing, and building diagnositcs professionals. The T840 and T860 offer an optional Inspection Routing module that speeds data collection and reporting by helping users plan out surveys and then organizing images and data by location. An integrated eyepiece viewfinder, bright 4-inch color LCD, and thoughtful ergonomic design allow inspectors to comfortably survey equipment for signs of failure—even in challenging lighting conditions. Advanced features such as 1-Touch Level/Span contrast enhancement and tack-sharp laser-assisted autofocus ensure the camera takes accurate temperature measurements every time. Maintain consistent uptime through regular maintenance routines with this flexible and innovative IR camera.

www.flir.com/T800-Series



IMPROVE WORKFLOW EFFICIENCIES

On-board routing and new FLIR software aid in the collection and management of critical data

- Develop and upload routes to the camera for streamlined inspections of critical assets within a plant or facility
- Acquire temperature data, 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 Pro

AVOID COSTLY OUTAGES AND COMPONENT FAILURES

Assess the thermal health of equipment and systems from any angle, in any lighting conditions

- Adapt to any work environment with a vibrant 4" color LCD display and an integrated eye-piece viewfinder
- Image targets overhead or down low without strain thanks to the 180° rotating optical block and ergonomic design
- Accurately measure small targets over long distance or in large scenes 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 the FLIR Tools® App

SPECIFICATIONS

Imaging and optical data	T840	T860
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°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)
Digital zoom	1-6× continuous	1-8× continuous
Macro Mode (24° lens option)	71 µm min. focus distance	50 µm min. focus distance

Detector date	
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/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 24° lens: 0.15 m; optional macro mode 14° lens: 1.0 m 6° lens: 5.0 m
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, Gray, Rainbow, Arctic, Lava, Rainbow HC
Image modes	Infrared, visual, MSX®, Picture-in-picture
Picture-in-picture	Resizable and movable
UltraMax®	Activated in menu and processed in FLIR Tools®

Measurement and analysis	
Accuracy	±2°C (±3.6°F) or ±2% of reading
Spotmeter and area	3 each in live mode
Measurement presets	No measurement, Center spot, Hot spot, Cold spot, User Preset 1, User Preset 2

Measurement and analysis - Cont.	
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	
Inspection Routing	File created in FLIR Thermal Studio Pro using FLIR Route Creator plug-in
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, 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
Safety	EN/UL/CSA/PSE 60950-1
Weight (including battery)	1.4 kg (3.1 lbs)
Size (l × w × h, lens vertical)	150.5 × 201.3 × 84.1 mm (5.9 × 7.9 × 3.3 in)

Package contents

Infrared camera, lens, front and rear lens caps, cleaning cloth, small eyecup, rechargeable battery (2 ea.), charger power supply, 15 W/3 A power supply, straps (lens cap, neck), cables (USB 2.0 A to USB Type-C, USB Type-C to USB Type-C,USB Type-C to HDMI and PD adapter), 8 GB SD card, printed documentation

FLIR® | The World's Sixth Sense®