FLIR *T500-Series*™

Professional Thermal Imaging Cameras

The T530 and T540 are designed to support advanced thermographers and IR service consultants in the power generation, electrical distribution, and manufacturing industries by focusing on resolution, speed, and ergonomics. With the 180° rotating optical block, vibrant LCD display, and streamlined form factor, the T500-Series offers inspectors the necessary tools to support comprehensive inspections in challenging conditions, especially when equipment is obstructed from view or difficult to access.

Maximize Efficiency, Safety, and Performance

Assess equipment and prevent component failure – safely and comfortably – from any vantage point

- Reduce the strain of full-day inspections with 180° rotating optical block for imaging targets overhead or below
- Scan large areas from a safe distance with up to 464 x 348 resolution, delivering 161,472 non-contact temperature measurement points
- Share lenses (wide angle to telephoto) across your fleet of cameras thanks to AutoCal™ optics
- Ensure crisp thermal imagery and spot-on temperature readings every time with laser-assisted autofocus

Make Critical Decisions Quickly

Advanced imaging technology and superior sensitivity help you make the right call – fast

- Get industry-leading image clarity from FLIR Vision Processing™, through the power of MSX®, UltraMax®, and proprietary adaptive filtering
- Determine accessibility of components for repair at the touch of a button by activating on-screen laser distance measurement
- See problems and make decisions easily thanks to scratch-resistant 4" LCD display that's 33% brighter and 4x the resolution of comparable cameras

Designed to Make Your Work Easier

Get most out of your workday with rapid reporting features that help you organize findings in the field

- Quickly access menus, folders, and settings using intuitive controls, including rapid-response touchscreen and two programmable buttons
- Allow customers to observe critical findings in real time through Wi-Fi streaming to the FLIR Tools app
- Optimize workflows with streamlined reporting features, such as built-in voice annotation, text comments with auto-fill, and image sketch
- Prepare precise documentation with embedded GPS locations, as well as measurement data from METERLiNK®-enabled FLIR clamps and multimeters
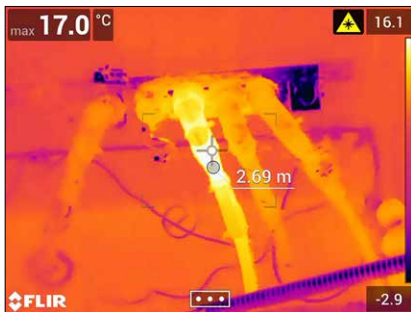
Key Features:

- 180° rotating optical block and vivid 4" capacitive touch screen
- Up to 464 x 348 pixel native resolution (161,472 points of measurement)
- Fast and precise laser-assisted autofocus
- Laser distance and on-screen area measurement
- Customizable work folders
- Intelligent, interchangeable AutoCal™ lenses
- Industry-leading FLIR 2-5-10 warranty

Up to 161,472 pixel resolution for accurate readings on distant targets

Share lenses (wide angle to telephoto) across your fleet of cameras thanks to AutoCal™ optics

Laser-assisted autofocus and distance measurement ensure accurate readings when outside flash protection boundaries

FLIR® | The World's Sixth Sense™

Specifications

	T530	T540
IR Resolution	320 x 240 (76,800 pixels)	464 x 348 (161,472 pixels)
UltraMax® Resolution	307,200 effective pixels	645,888 effective pixels
Object Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) Optional Calibration: 300°C to 1200°C (572°F to 2192°F)	-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)
Digital Zoom	1-4x continuous	1-6x continuous
Common Features		
Detector Type and Pitch	Uncooled microbolometer, 17 µm	
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)	
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	
Macro Mode	24° lens option / 103 µm effective spotsize	24° lens option / 71 µm effective spotsize
Programmable Buttons	2	
Image Presentation and Modes		
Display	4", 640 x 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®	Quadruples pixel count; 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 ea. in live mode	
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	
Annotations		
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	From touchscreen, on infrared image only	
Distance, Area Measurement	Yes; calculates area inside measurement box in m² or ft²	
GPS	Automatic image tagging	
METERLiNK®	Yes	
Image Storage		
Storage Media	Removable SD card	
Image File Format	Standard JPEG with measurement data included	
Time Lapse (Infrared)	10 sec to 24 hrs	

Specifications are subject to change without notice.
For the most up-to-date specs, go to www.flir.com

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	Yes, over UVC or Wi-Fi
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
Video Out	DisplayPort over USB Type-C
Additional Data	
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)
Storage Temperature Range	–40°C to 70°C (-40°F to 158°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/Dimensions w/o Lens	1.3 kg (2.9 lbs), 140 x 201 x 84 mm (5.5 x 7.9 x 3.3 in)
Box Contents	
Packaging	Infrared camera with lens, 2 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)

www.flir.com/T500Series

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