

FLIR T500-SERIES™

Professional Thermal Imaging Cameras



Safely diagnose potential faults with a portable, ergonomic FLIR T500-Series thermal camera. Paired with a FLIR FlexView™ dual field-of-view lens, T500-Series cameras give you the convenience to instantly switch from wide-area to telephoto scanning without changing the lens. Streamline industrial, electrical, and mechanical surveys and repairs with Inspection Route* mode, which runs pre-planned routes created in FLIR Thermal Studio Pro†

MAKE CRITICAL DECISIONS QUICKLY

Advanced imaging technology and high sensitivity help professionals make the right call – fast

- Change from wide area scanning to telephoto instantly with the FlexView dual field-of-view lens
- Get industry-leading image clarity from FLIR Vision Processing™ through the power of patented FLIR MSX®, UltraMax®, and proprietary adaptive filtering
- Use the laser distance measurement tool to effortlessly transfer precise object distance data into your reports
- Match the visual camera's field of view with up to 640 × 480 thermal resolution, delivering 307,200 radiometric non-contact temperature measurement points, or up to 1.2 MP using UltraMax resolution enhancement

MAXIMIZE EFFICIENCY, SAFETY, & PERFORMANCE

Assess equipment and prevent component failure safely from any vantage point

- Target overhead components with less strain thanks to the 180° rotating optical block
- Share lenses (wide angle to telephoto) across a fleet of cameras with AutoCal™ optics
- Ensure precision measurement with laser-assisted autofocus and 1-Touch Level/Span
- Make decisions easily with an LCD display that's 33% brighter and 4x the resolution of comparable cameras

TOOLS TO MAKE THE JOB EASIER

Organize findings in the field with built-in navigation and reporting features

- Quickly access menus, folders, and settings using intuitive controls, including rapid response touchscreen and two programmable buttons
- Streamline inspections by downloading survey routes from FLIR Thermal Studio Pro to the cameras*†
- Upload and organize images to FLIR Ignite cloud for secure storage, sharing, and importing to reports‡
- Prepare precise documentation with embedded GPS locations as well as measurement data from METERLiNK®-enabled FLIR clamp meters and multimeters

SPECIFICATIONS

General	T530	T540	T560
IR resolution	320 × 240 (76,800 pixels)	464 × 348 (161,472 pixels)	640 × 480 (307,200 pixels)
UltraMax [®] resolution	307,200 effective pixels	645,888 effective pixels	1.2 MP 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)	-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)
Thermal lens options	6°, 14°, 24°, 42°, Dual FOV (14°+24°) athermalized lenses, 2X Macro Lens and Macro Mode options		
Detector type and pitch	Uncooled microbolometer, 17 µm		Uncooled microbolometer, 12 µm
Digital zoom	1-4x continuous	1-6x continuous	1-8x continuous
Common Features			
Thermal sensitivity/NETD	<30 mK @ 30°C/86°F (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), f/1.3/1.3 (14°/24° dual field-of-view lens)		
Focus	Continuous with laser distance meter (LDM), one-shot LDM, one-shot contrast, manual		
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, Gray, Rainbow, Arctic, Lava, Rainbow HC		
Image modes	Infrared, visual, MSX [®] , Picture-in-Picture		
Picture-in-picture	Resizable and movable		
UltraMax	Super-resolution process quadruples pixel count; activated in menu and processed in reporting software		
Measurement and Analysis			
Accuracy, full range	±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		
Lens protection	Yes, industrial protective lens window optional accessory		

Annotations	
Inspection routing	Camera firmware option; 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	From touchscreen, on infrared image only
Distance, area measurement	Yes; calculates area inside measurement box in m ² or ft ²
METERLiNK	Yes
Compass, GPS	Yes; automatic GPS image tagging
Communications & Connections	
Cloud services (via Wi-Fi)	FLIR Ignite for direct, secure image uploading, organizing, and sharing
METERLiNK (via Bluetooth)	Wireless connection to FLIR meters with METERLiNK
Image Storage	
Storage	Removable SD card; onboard FLIR Ignite cloud connectivity with Wi-Fi
Image file format	Standard JPEG with measurement data included
Timelapse (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	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)
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 without lens	1.3 kg (2.9 lbs), 140 × 201 × 84 mm (5.5 × 7.9 × 3.3 in)

Specifications are subject to change without notice. For the most up-to-date specifications, visit www.flir.com/T-Series.

For more information contact: Sales@TeledyneFLIR.com
or to find your local support number, visit: flir.com/contactsupport

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