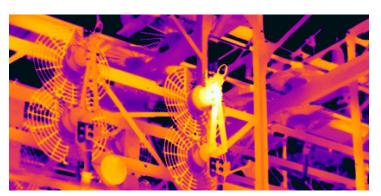


FLIR T500-SERIES™

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[†]. Record temperature data and imagery in a logical sequence for more efficient troubleshooting and repair scheduling, then upload images directly to the FLIR Ignite[‡] cloud for secure storage, sharing, and importing into Thermal Studio.





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°), 80° lenses		
Detector type and pitch	Uncooled microbolometer 17 jum		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/13.5 (6° lens), f/1.5 (14° lens), f/1.3/1.3 (14°/24° dual field-of-view lens), f/1.3 (24° lens), f/1.1 (42° lens), f/1.3 (80° 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, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava - each with Histogram and Temperature Linear display		
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 A	Analysis		
Accuracy, full range	$\pm 2^{\circ}$ C ($\pm 3.6^{\circ}$ F) or $\pm 2\%$ 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, lens cover included. I (PN: T300493ACC)	ndustrial protective lens w	indow optional accessory

Specifications are subject to change without notice.

Annotations			
Allifolations	O C		
Inspection routing	Camera firmware option; file created in FLIR Thermal Studio Pro using FLIR Route Creator plug-in for baseline image comparison and image overlay guidance		
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		
METERLINK	Yes		
Compass, GPS	Yes; automatic GPS image tagging		
Communications &	Connections		
Cloud services (via Wi-Fi)	FLIR Ignite for direct, secure image uploading, organizing, storage, and sharing (Over The Air firmware update)		
METERLINK (via Bluetooth)	Wireless conection 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 an	d 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)		

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

©2022 Teledyne FLIR, LLC. All rights reserved.

Revised 10/04/23 T500-Series_Datasheet-LTR 21-0000

