

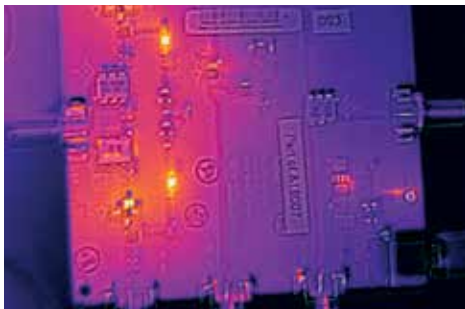


THERMAL CAMERAS FOR SCIENCE APPLICATIONS

FLIR T500-Series™

FLIR T500-Series cameras offer the precision measurement, speed, and flexibility needed to support science, research, and product development applications. These uncooled infrared cameras produce crisp, vibrant imagery enhanced through UltraMax® technology, for up to 1.2 MP thermal resolution. The built-in Macro Mode allows R&D users to quickly switch from wide angle to close-up analysis without changing the lens. And thanks to the award-winning ergonomic design and intuitive, rapid-response interface, T500-Series cameras can increase efficiency and help reduce test times. When coupled with Research Studio software, these cameras help researchers quickly assess unexpected hot spots and find potential design flaws.

www.flir.com/T-Series_Science



PRECISE TEMPERATURE MEASUREMENT

Measure temperatures accurately with the sensitivity and detail needed to quickly identify faults and characterize thermal gradients

- Sensitive enough to detect temperature differences smaller than 0.03°C
- Built-in Macro Mode measures components down to 50 µm/pixel spot size or 24 µm/pixel with available 2x macro lens (T560)
- Quantify heat generation and thermal dissipation up to 1500°C



EFFICIENT TESTING & REPORTING

Set up, start testing, and analyze data quickly with streamlined user features and analysis tools

- Begin measuring quickly and easily thanks to intuitive graphical user interfaces and menus
- Stream radiometric data over USB or Wi-Fi to immediately transition from testing to analysis
- Perform in-depth analysis and share data through FLIR Research Studio software (optional)



INTUITIVE THERMAL IMAGERY

Build client trust through sharp, brilliant images that are also easy for non-experts to interpret

- Produce stand-out 640 × 480 pixel IR imagery, or enhance to 1.2 MP with UltraMax processing (T560)
- Interpret images quickly with the added perspective of FLIR's proprietary MSX® image enhancement
- Ensure tack-sharp focus for crisp imagery by using the precise laser-assisted autofocus

SPECIFICATIONS

Features By Camera	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	1,228,800 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)
Detector Pitch	17 µm	17 µm	12 µm
Macro Mode (24° lens option)	103 µm effective spot size	71 µm effective spot size	50 µm effective spot size
Digital Zoom	1-4x continuous	1-6x continuous	1-8x continuous
Common Features			
Detector Type	Uncooled microbolometer		
Thermal Sensitivity/ NETD	<30 mK @ 30°C (86°F), 42° lens		
Spectral Range	7.5–14.0 µm		
Image Frequency	30 Hz		
Programmable Buttons	2		
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		
Programmable Buttons	2		
Image Presentation			
Display	4", 640 × 480 pixel touchscreen LCD with auto-rotation		
Digital Camera	5 MP, with built-in LED photo/video lamp		
Color Palettes	Arctic, White Hot, Black Hot, Iron, Lava, Rainbow, Rainbow HC		
Image Modes	Infrared, visual, MSX®, Picture-in-Picture, optional Macro Mode		
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		
Area Measurement Information	Yes, with laser distance meter active		

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
GPS	Automatic image tagging
METERLiNK®	Wireless connection to FLIR meters that also have METERLiNK
Image Storage	
Storage Media	Removable SD card
Image File Format	Standard JPEG with temperature measurement data
Time Lapse (Infrared)	10 sec to 24 hrs (infrared)
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
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 and Dimensions	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, neck strap, hard transport case, lanyards, front lens cap, power supply for battery charger, printed documentation, 8 GB SD card, cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C), license card for FLIR Thermal Studio Pro + FLIR Route Creator (3 month subscription)

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

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