

# 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:

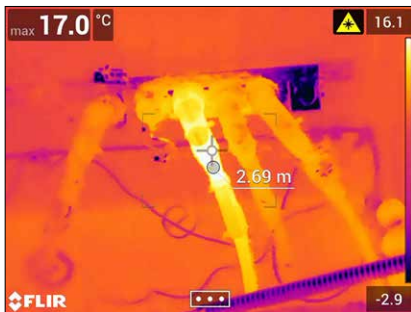
- 180° rotating optical block and vivid 4" capacitive touch screen
- Up to 464 x 348 pixel native resolution (161,472 points of measurement)
- Fast and precise laser-assisted autofocus
- Laser distance and on-screen area measurement
- Customizable work folders
- Intelligent, interchangeable AutoCal™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



The World's Sixth Sense™

## Specifications

|                                     | T530   | T540  |
|-------------------------------------|--|---|
| IR Resolution                       | 320 x 240<br>(76,800 pixels)   | 464 x 348<br>(161,472 pixels)   |
| UltraMax® Resolution                | 307,200 effective pixels   | 645,888 effective pixels  |
| Object Temperature Range            | -20°C to 120°C<br>(-4°F to 248°F)<br>0°C to 650°C<br>(32°F to 1202°F)<br>Optional Calibration:<br>300°C to 1200°C<br>(572°F to 2192°F) | -20°C to 120°C<br>(-4°F to 248°F)<br>0°C to 650°C<br>(32°F to 1202°F)<br>300°C to 1500°C<br>(572°F to 2732°F) |
| Digital Zoom                        | 1-4x continuous  | 1-6x continuous   |
| <b>Common Features</b>              |  |   |
| 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<br>24° lens – 0.15 m; optional macro mode<br>14° lens – 1.0 m  |   |
| Macro Mode                          | 24° lens option / 103 µm effective spotsize  | 24° lens option / 71 µm effective spotsize  |
| Programmable Buttons                | 2  |   |
| <b>Image Presentation and Modes</b> |  |   |
| 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  |   |
| <b>Measurement and Analysis</b>     |  |   |
| 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  |   |
| <b>Annotations</b>                  |  |   |
| 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  |   |
| <b>Image Storage</b>                |  |   |
| 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](http://www.flir.com)

| <b>Video Recording and Streaming</b>  |   |
|---------------------------------------|---|
| 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<br>MJPEG over UVC or Wi-Fi   |
| Communication Interfaces              | USB 2.0, Bluetooth, Wi-Fi   |
| Video Out                             | DisplayPort over USB Type-C   |
| <b>Additional Data</b>                |   |
| 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),<br>140 x 201 x 84 mm (5.5 x 7.9 x 3.3 in)   |
| <b>Box Contents</b>                   |   |
| 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) |

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