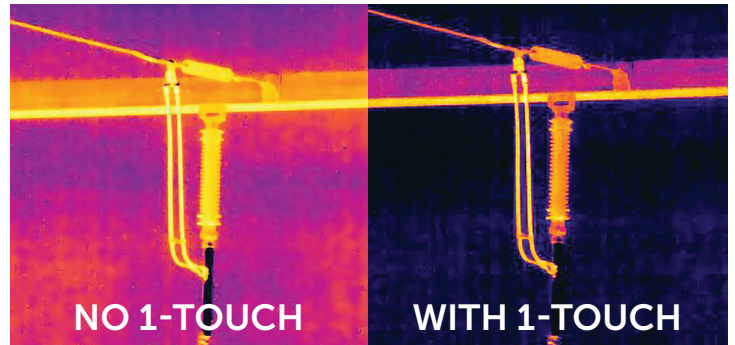


# FLIR T800-SERIES

High-Performance Handheld Infrared Cameras



FLIR T800-Series thermal imaging cameras are powerful, ergonomic non-contact inspection tools. The 180° tilting optic design makes it comfortable, safe, and easy to assess the condition of critical electrical and mechanical equipment all day long. With advanced features including unmatched temperature measurements down to -40°C, accuracy as good as  $\pm 1^\circ\text{C}$  /  $\pm 1\%$ , 1-Touch Level/Span contrast enhancement, and laser-assisted autofocus, you'll get highly accurate temperature measurements every time. Pair any T800-Series camera with a FLIR FlexView™ dual field-of-view lens for the convenience to instantly switch from wide-area to telephoto scanning; or combine a 6° FOV IR lens with the T865 to perform inspections on small targets from long distances. With the on-board Inspection Route system, you'll be able to record temperature data and imagery in a logical sequence for faster troubleshooting and repair.



## IMPROVE WORKFLOW EFFICIENCIES

Collect and manage critical data quickly and easily

- Change from wide area scanning to telephoto instantly with the FlexView dual field-of-view lens
- Develop inspection routes in FLIR Thermal Studio Pro with FLIR Route Creator and upload them to the camera for streamlined inspections of critical assets
- Acquire temperature data and thermal and visual imagery in a logical sequence for faster preventative/predictive maintenance procedures
- Upload directly and securely to FLIR Ignite cloud and automate data management and reporting through easy transfer of organized files to FLIR Thermal Studio Pro

## WORK SAFELY AND COMFORTABLY

Assess the state of equipment from a safe distance, at any angle, or in any lighting condition

- Use the camera in any environment – indoors or out – with a large, vibrant 4-inch color LCD display and an integrated eyepiece viewfinder for working in bright sunlight
- Image targets overhead or down low without strain thanks to the 180° rotating optical block and ergonomic design
- Accurately measure small targets over long distances or in large scenes by pairing the high-resolution IR sensor with the optional 6° telephoto lens

## MAKE CRITICAL DECISIONS QUICKLY

Save time and share data faster to increase in-field efficiency

- Ensure precision measurement with laser-assisted autofocus, 1-Touch Level/Span, and exceptional temperature accuracy<sup>1</sup>
- Avoid diagnostic errors with industry-leading image clarity from FLIR Vision Processing™, combining MSX®, UltraMax®, and proprietary adaptive filtering algorithms
- Optimize workflows with reporting features such as built-in voice annotation, customizable work folders, and Wi-Fi sync to FLIR mobile apps

## SPECIFICATIONS

| Features By Camera           |  | T840                                                                                                                                  | T865                                                                                                                                                                                                                                                                        |
|------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IR Resolution                |  | 464 × 348 (161,472 pixels; 645,888 with UltraMax)                                                                                     | 640 × 480 (307,200 pixels; 1,228,800 with UltraMax)                                                                                                                                                                                                                         |
| Detector Pitch               |  | 17 μm                                                                                                                                 | 12 μm                                                                                                                                                                                                                                                                       |
| Object Temperature Range     |  | -20 to 120°C (-4°F to 248°F)<br>0°C to 650°C (32°F to 1202°F)<br>300°C to 1500°C (572°F to 2732°F)                                    | -20°C to 120°C (-4°F to 248°F)<br>0°C to 650°C (32°F to 1202°F)<br>300°C to 2000°C (572°F to 3632°F)                                                                                                                                                                        |
| Digital Zoom                 |  | 1-6x continuous                                                                                                                       | 1-8x continuous                                                                                                                                                                                                                                                             |
| Macro Mode (24° lens option) |  | 71 μm min. focus distance                                                                                                             | 50 μm min. focus distance                                                                                                                                                                                                                                                   |
| Spotmeter and Area           |  | 3 each in live mode                                                                                                                   | 10 and 5 in live mode                                                                                                                                                                                                                                                       |
| Accuracy                     |  | ±2°C (±3.6°F) -20°C to 100°C (-4°F to 212°F),<br>±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 1500°C (572°F to 2732°F),            | ±1°C (±1.8°F): 5°C to 100°C (41°F to 212°F)<br>±1%: 100°F to 120°C (212°F to 248°F)<br>±2°C (±3.6°F): -40°C to 100°C (-40°F to 212°F)<br>±2%: 100°C to 650°C (212°F to 1202°F), 300°C to 2000°C (572°F to 3632°F)<br>±3%: 1800°C to 2000°C (3272°F to 3632°F) with 42° lens |
| Detector Data                |  |                                                                                                                                       |                                                                                                                                                                                                                                                                             |
| Detector Type and Pitch      |  | Uncooled microbolometer                                                                                                               |                                                                                                                                                                                                                                                                             |
| 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/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                                                   |                                                                                                                                                                                                                                                                             |
| Thermal Lens Options         |  | 6°, 14°, Dual FOV (14° + 24°), 24°, 42°, 80° lenses                                                                                   |                                                                                                                                                                                                                                                                             |
| 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®                    |  | Activated in menu and processed in FLIR reporting software                                                                            |                                                                                                                                                                                                                                                                             |
| Measurement and Analysis     |  |                                                                                                                                       |                                                                                                                                                                                                                                                                             |
| 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, displays distance on-screen                                                                                    |                                                                                                                                                                                                                                                                             |
| Lens Protection              |  | Yes, lens cover included. Industrial protective lens window optional accessory (PN: T300493ACC)                                       |                                                                                                                                                                                                                                                                             |
| On-screen Area Measurement   |  | Yes; calculates area inside measurement box in m² or ft²                                                                              |                                                                                                                                                                                                                                                                             |

Specifications are subject to change without notice.

| Annotations                           |                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLIR Inspection Route™                | Enabled in the camera - 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                          | Infrared images only; from touchscreen                                                                                                                                                                                                                                                                                                                                                               |
| METERLiNK®                            | Yes                                                                                                                                                                                                                                                                                                                                                                                                  |
| GPS                                   | Automatic image tagging                                                                                                                                                                                                                                                                                                                                                                              |
| Communication & 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 connection to FLIR meters with METERLiNK                                                                                                                                                                                                                                                                                                                                                    |
| Image Storage                         |                                                                                                                                                                                                                                                                                                                                                                                                      |
| Storage                               | Removable SD card; FLIR Ignite cloud uploading                                                                                                                                                                                                                                                                                                                                                       |
| Image File Format                     | Standard JPEG with measurement data included                                                                                                                                                                                                                                                                                                                                                         |
| Time Lapse (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        | Compressed, over UVC                                                                                                                                                                                                                                                                                                                                                                                 |
| 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, DisplayPort                                                                                                                                                                                                                                                                                                                                                               |
| Video Out                             | DisplayPort                                                                                                                                                                                                                                                                                                                                                                                          |
| Additional Data                       |                                                                                                                                                                                                                                                                                                                                                                                                      |
| Languages                             | 21                                                                                                                                                                                                                                                                                                                                                                                                   |
| 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 (including battery)            | 1.4 kg (3.1 lbs)                                                                                                                                                                                                                                                                                                                                                                                     |
| Size (l×w×h, lens vertical)           | 164 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in)                                                                                                                                                                                                                                                                                                                                                           |
| Box Contents                          |                                                                                                                                                                                                                                                                                                                                                                                                      |
| Packaging                             | Infrared camera with lens, small viewfinder eyecup, 2 rechargeable batteries, battery charger, hard transport case, lanyards, front lens cap, power supplies, printed documentation, SD card (8GB), cables (USB 2.0 A to USB Type-C, USB Type-C to HDMI, USB Type-C to USB Type-C), License card: FLIR Thermal Studio Pro (3-month subscription) + FLIR Route Creator Plugin for Thermal Studio Pro* |

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