

TECHNICAL DATA

# Fluke Ti300+ Thermal Imager



### Accurate, reliable results

Find issues before they are fully formed. The resolution and accuracy needed to clearly reveal temperature differentials or demonstrate progressive heat changes over time. With LaserSharp™ AutoFocus the Ti300+ ensures focused images—every single time. Enable your team to get clear images while maintaining a safe distance from operating equipment.

- 320 x 240 resolution
- Measure up to 650 °C
- Engineered and tested to withstand a 2-meter drop
- Manual or automatic focus

### Focus matters—intelligent focus system

Patented Fluke LaserSharp Auto Focus uses a built-in laser distance meter that provides both speed and precision. The laser-driven target detection pinpoints the target while the camera focuses to capture a precise, high-quality image.

- Easily capture high-quality, focused images of your desired target with the push of a button
- Take infrared images through common obstacles like chain link fences
- Avoid skewed temperature measurements by precisely choosing your target
- Perform the same inspections multiple times as a part of your preventive maintenance program—the built-in laser distance meter calculates and displays how far you are from your target, making repeatability much easier.



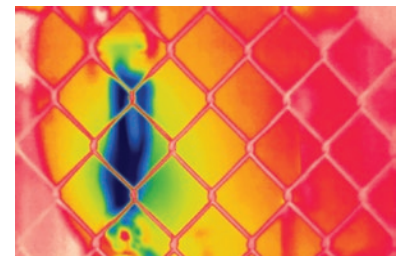
### POWERFUL, EASY-TO-USE FLUKE CONNECT™ SOFTWARE

The Ti300+ thermal camera is compatible with Fluke Connect—the largest integrated system of maintenance software and tools in the world.

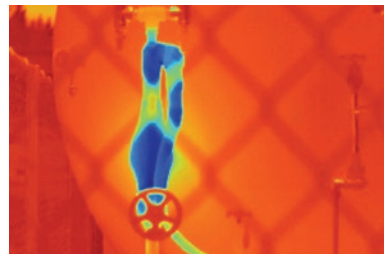
- Modern visual design
- Intuitive navigation—easier to learn, easier and faster to work in
- Simplified work flows
- Simplified reporting work flow and better report templates



Difficult inspection sites



Passive auto focus systems may only capture near-field subject, meaning that you may be capturing measurements of the wrong target.



Fluke LaserSharp Auto Focus allows you to select and focus on a specific target.

## Detailed specifications

|                                                 | Ti300+                                                                                                                                                            |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Key Features</b>                             |                                                                                                                                                                   |
| Infrared resolution                             | 320 x 240 (76,800 pixels)                                                                                                                                         |
| SuperResolution™                                | No                                                                                                                                                                |
| IFOV with standard lens (spatial resolution)    | 1.85 mRad, D:S 532:1                                                                                                                                              |
| Field of view                                   | 34° H x 24° V                                                                                                                                                     |
| Minimum focus distance                          | 15 cm (approx. 6 in)                                                                                                                                              |
| MultiSharp™ Focus                               | No                                                                                                                                                                |
| LaserSharp™ Auto Focus                          | Yes, for consistently in-focus images. Every. Single. Time.                                                                                                       |
| Laser distance meter                            | Yes, calculates distance to the target for precisely focused images and displays distance on screen                                                               |
| Advanced manual focus                           | Yes                                                                                                                                                               |
| Wireless connectivity                           | Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN (where available)                                                          |
| Fluke Connect™ app compatible                   | Yes*, connect your camera to your smartphone, and images taken automatically upload to the Fluke Connect app for saving and sharing                               |
| Fluke Connect Assets                            | Through the desktop, assign images to assets, easily compare measurement types in one location and create reports.                                                |
| Fluke Connect instant cloud upload              | Yes*, connect your camera to your building's WiFi network, and images taken automatically upload to the Fluke Connect system for viewing on your smartphone or PC |
| Fluke Connect instant server upload             | No                                                                                                                                                                |
| IR-Fusion™ technology                           | Yes, adds the context of the visible details to your infrared image                                                                                               |
| Ruggedized touchscreen display                  | 3.5 inch (landscape), 640 x 480 LCD                                                                                                                               |
| Ergonomic design                                | Pistol-grip design for one-handed use                                                                                                                             |
| Thermal sensitivity (NETD)**                    | ≤ 0.075 °C at 30 °C target temp (75 mK)                                                                                                                           |
| Level and span                                  | Smooth auto and manual scaling                                                                                                                                    |
| Touchscreen adjustable level/span               | Yes                                                                                                                                                               |
| Fast auto toggle between manual and auto modes  | Yes                                                                                                                                                               |
| Fast auto-rescale in manual mode                | Yes                                                                                                                                                               |
| Minimum span (in manual mode)                   | 2.0 °C (3.6 °F)                                                                                                                                                   |
| Minimum span (in auto mode)                     | 3.0 °C (5.4 °F)                                                                                                                                                   |
| Built-in digital camera (visible light)         | 5MP                                                                                                                                                               |
| Frame rate                                      | 60 Hz or 9 Hz versions                                                                                                                                            |
| Laser pointer                                   | Yes                                                                                                                                                               |
| LED light (torch)                               | Yes                                                                                                                                                               |
| Digital zoom                                    | No                                                                                                                                                                |
| <b>Data storage and image capture</b>           |                                                                                                                                                                   |
| Extensive memory options                        | Removable 4 GB micro SD memory card, 4 GB internal flash memory, save to USB flash drive capability, upload for permanent storage                                 |
| Image capture, review, save mechanism           | One-handed image capture, review, and save capability                                                                                                             |
| Image file formats                              | bmp, jpeg, is2                                                                                                                                                    |
| Memory review                                   | Thumbnail and full screen review                                                                                                                                  |
| Software                                        | Full analysis and reporting software with access to the Fluke Connect system                                                                                      |
| Analyze and store radiometric data on a PC      | Yes                                                                                                                                                               |
| Export file formats with Fluke Connect software | Bitmap (.bmp), GIF, JPEG, PNG, TIFF                                                                                                                               |
| Voice annotation                                | 60 seconds maximum recording time per image; reviewable playback on camera, optional Bluetooth headset available but not required                                 |
| IR-PhotoNotes™                                  | Yes - 2 images                                                                                                                                                    |
| Text annotations                                | Yes. Including standard shortcuts as well as user programmable options                                                                                            |
| Video recording and formats                     | No                                                                                                                                                                |
| Remote control operations                       | No                                                                                                                                                                |
| Auto capture (temperature and interval)         | No                                                                                                                                                                |
| MATLAB® and LabVIEW® tool boxes                 | No                                                                                                                                                                |

\* Fluke Connect analysis and reporting software is available in all countries but Fluke Connect is not. Please check availability with your authorized Fluke distributor.

\*\* Best possible

## Detailed specifications

| Ti300+                                                      |                                                                                                                                                                                           |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Battery</b>                                              |                                                                                                                                                                                           |
| Batteries (field-replaceable, rechargeable)                 | Two lithium ion smart battery packs with five-segment LED display to show charge level                                                                                                    |
| Battery life                                                | 2-3 hours per battery (actual life varies depending on settings and usage)                                                                                                                |
| Battery charging time                                       | 2.5 hours to full charge                                                                                                                                                                  |
| Battery charging system                                     | Two-bay battery charger or in-imager charging. Optional 12 V automotive charging adapter                                                                                                  |
| AC operation                                                | AC operation with included power supply (100 V ac to 240 V ac, 50/60 Hz)                                                                                                                  |
| Power saving                                                | User selectable sleep and power off modes                                                                                                                                                 |
| <b>Temperature measurement</b>                              |                                                                                                                                                                                           |
| Temperature measurement range (not calibrated below -10 °C) | -20 °C to 650 °C (-4 °F to 1,202 °F)                                                                                                                                                      |
| Accuracy                                                    | ± 2 °C or 2 % (at 25 °C nominal, whichever is greater)                                                                                                                                    |
| On-screen emissivity correction                             | Yes (both value and table)                                                                                                                                                                |
| On-screen reflected background temperature compensation     | Yes                                                                                                                                                                                       |
| On-screen transmission correction                           | Yes                                                                                                                                                                                       |
| Line temperature graph                                      | No                                                                                                                                                                                        |
| <b>Color palettes</b>                                       |                                                                                                                                                                                           |
| Standard palettes                                           | 9: Rainbow, Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted                                                                             |
| Ultra contrast palettes                                     | 9: Rainbow, Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted                                                                             |
| <b>Smart lenses</b>                                         |                                                                                                                                                                                           |
| Macro-25 micron lens: 25 MAC2                               | Yes                                                                                                                                                                                       |
| 2 x telephoto lens: TELE 2                                  | Yes                                                                                                                                                                                       |
| 4 x telephoto lens: TELE4                                   | Yes                                                                                                                                                                                       |
| Wide angle lens: WIDE 2                                     | Yes                                                                                                                                                                                       |
| <b>General specifications</b>                               |                                                                                                                                                                                           |
| Color alarms (temperature alarms)                           | High temperature, low temperature, and isotherms (within range)                                                                                                                           |
| Infrared spectral band                                      | 7.5 µm to 14 µm (long wave)                                                                                                                                                               |
| Operating temperature                                       | -10 °C to 50 °C (14 °F to 122 °F)                                                                                                                                                         |
| Storage temperature                                         | -20 °C to 50 °C (-4 °F to 122 °F) without batteries                                                                                                                                       |
| Relative humidity                                           | 10 % to 95 % non-condensing                                                                                                                                                               |
| Center-point temperature measurement                        | Yes                                                                                                                                                                                       |
| Spot temperature                                            | Hot and cold spot markers                                                                                                                                                                 |
| User-definable spot markers                                 | No                                                                                                                                                                                        |
| User defined measurement boxes                              | 1 expandable-contractible measurement box with MIN-MAX-AVG temp display                                                                                                                   |
| Hard case                                                   | Rugged, hard carrying case; soft transport bag                                                                                                                                            |
| Safety                                                      | IEC 61010-1: Overvoltage category II, Pollution Degree 2                                                                                                                                  |
| Electromagnetic compatibility                               | IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A                                                                                                                             |
| Australian RCM                                              | IEC 61326-1                                                                                                                                                                               |
| US FCC                                                      | CFR 47, Part 15 Subpart B                                                                                                                                                                 |
| Vibration                                                   | 0.03 g <sup>2</sup> /Hz (3.8 g), 2.5 g IEC 60068-2-6                                                                                                                                      |
| Shock                                                       | 25 g, IEC 68-2-29                                                                                                                                                                         |
| Drop                                                        | Engineered to withstand 2 meter (6.5 feet) drop with standard lens                                                                                                                        |
| Size (H x W x L)                                            | 27.7 cm x 12.2 cm x 16.7 cm (10.9 in x 4.8 in x 6.5 in)                                                                                                                                   |
| Weight (battery included)                                   | 1.04 kg (2.3 lb)                                                                                                                                                                          |
| Enclosure rating                                            | IEC 60529: IP54 (protected against dust, limited ingress; protection against water spray from all directions)                                                                             |
| Warranty                                                    | Two-years (standard), extended warranties are available                                                                                                                                   |
| Recommended calibration cycle                               | Two-years (assumes normal operation and normal aging)                                                                                                                                     |
| Supported languages                                         | Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish |
| RoHS compliant                                              | Yes                                                                                                                                                                                       |

## Ordering information

FLK-Ti300+ 60 Hz Infrared Camera  
 FLK-Ti300+ 9 Hz Infrared Camera

### Included

Infrared camera with standard infrared lens; ac power supply and battery pack charger (including universal ac adapters); two rugged lithium ion smart battery packs; USB cable; HDMI video cable; 4GB micro SD card; rugged, hard carrying case, soft transport bag and adjustable hand strap. **Available by free download:** Fluke Connect desktop software and user manual

### Optional accessories

**FLK-LENS/TELE2** Infrared Telephoto Lens (2X magnification)  
**FLK-LENS/4XTELE2** Infrared Telephoto Lens (4X magnification)  
**FLK-LENS/WIDE2** Infrared Wide Angle Lens  
**FLK-LENS/25MAC2** 25 Micron Macro Infrared Lens  
**TI-CAR-CHARGER** Car Charger  
**FLK-TI-VISOR3** Sun Visor  
**BOOK-ITP** Introduction to Thermography Principles Book  
**TI-TRIPOD3** Tripod Mounting Accessory  
**FLK-TI-BLUETOOTH** Bluetooth headset  
**FLK-TI-SBP3** Additional Smart Battery  
**FLK-TI-SBC3B** Additional Smart Battery Charger

Visit [www.fluke.com](http://www.fluke.com) to get complete details on these products or ask your local Fluke sales representative.



## Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect system.

- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Access baseline, historical and current measurements by asset.
- Share your measurement data using ShareLive™ video calls and emails.
- The Ti300+ infrared camera is part of a growing system of connected test tools and equipment maintenance software. Visit the website to learn more about the Fluke Connect system.

Find out more at [flukeconnect.com](http://flukeconnect.com)



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**Smart phone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.**

**Fluke.** *Keeping your world up and running.*®

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