TECHNICAL DATA

Fluke Ti300+ Thermal Imager

FLUKE CONNECT®

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

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.

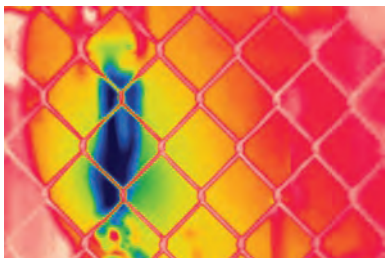
- 320 x 240 resolution
- Measure up to 650 °C
- Engineered and tested to withstand a 2-meter drop
- Manual or automatic focus

Focus matters—intelligent focus system

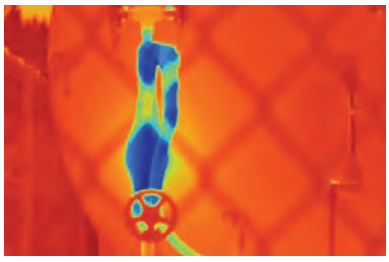
Patented Fluke LaserSharp Auto Focus uses a built-in laser distance meter that provides both speed and precision. The laser-driven target detection pinpoints the target while the camera focuses to capture a precise, high-quality image.

- 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.

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.

FLUKE®

Detailed specifications

	Ti300+
Key Features	
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
Data storage and image capture	
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

FLUKE®

Detailed specifications

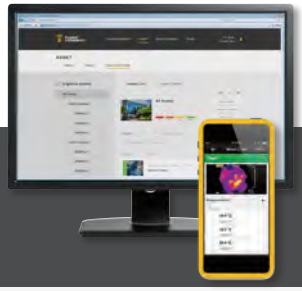
	Ti300+
Battery	
Batteries (field-replaceable, rechargeable)	Two lithium ion smart battery packs with five-segment LED display to show charge level
Battery life	2-3 hours per battery (actual life varies depending on settings and usage)
Battery charging time	2.5 hours to full charge
Battery charging system	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
Temperature measurement	
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
Color palettes	
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
Smart lenses	
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
General specifications	
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 g2/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



FLUKE CONNECT™

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.

Download on the App Store

ANDROID APP ON Google play

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.*®