

TECHNICAL DATA

Fluke TiS55+ and TiS75+ Thermal Imagers



FLUKE CONNECT™ ASSET TAGGING

Eliminate hours at the computer organizing your thermal images, let Asset Tagging do all that work for you. No more dragging and dropping or renaming files in the office, just scan a QR code on your asset, capture your thermal images and they automatically are sorted by asset. Start spending your time analyzing your images and creating reports instead of sorting your files one at a time.

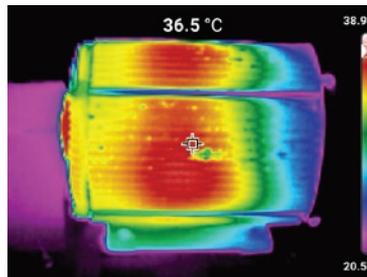
Be proactive instead of reactive

Take your plan for a proactive maintenance (PM) program and turn it into reality. To get started, you need features that make it easy to set up your image organization and inspection routines. With the TiS55+ and TiS75+, you're well on your way to implementing a successful PM program.

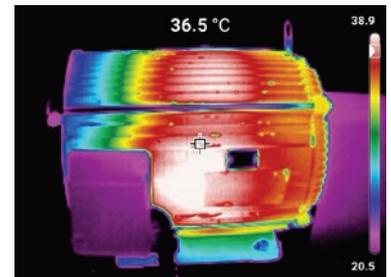
Ditch the clipboard

With so many inspections in your day, it can be hard to remember what you saw and where you inspected. Maybe you carry around a clipboard to jot down notes. The TiS55+ and TiS75+ come with built-in personal assistants, which means you can finally ditch the clipboard and have all the information you need embedded in the images you save, including:

- Voice annotation
 - Record up to 60 seconds per thermal image
 - Identify exactly what you see in real time
- IR-PhotoNotes
 - Take photos of asset numbers and other identifiers
 - Use as a reference when looking at the thermal image on your computer
- Asset Tagging
 - Sort your thermal images by asset
 - Scan a QR code on your asset, then start capturing thermal images
 - Images will automatically be sorted by asset, simply connect your camera to your computer to view them.



Infrared image of motor from Fluke TiS55+ thermal camera



Infrared image of motor from Fluke TiS75+ thermal camera

Rugged. Reliable. Accurate.

- 384 x 288 (TiS75+) or 256 x 192 (TiS55+) infrared resolution
- -20 °C to 550 °C temperature range
- 3.5" VGA Touchscreen LCD display
- Water and dust resistant (IP54)
- Engineered to withstand a 2-meter drop

Specifications

| Key Features | TiS75+ | TiS55+ |
|---|---|---|
| Infrared resolution | 384 x 288 (110,592 pixels) | 256 x 192 (49,152 pixels) |
| IFOV | 1.91 mRad | 1.91 mRad |
| Field of view | 42° x 30° | 28° x 20° |
| Minimum focus distance | 0.5 m | 0.5 m |
| Focus system | Manual focus and 1 meter focus marker | Manual focus and 1 meter focus marker |
| Wireless connectivity | Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi and LAN (where available) | Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi and 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 | Yes*, connect your camera to your smartphone, and images taken automatically upload to the Fluke Connect app for saving and sharing |
| Fluke Connect Assets optional software | Yes*, assign images to assets and create work orders. Easily compare measurement types –whether mechanical, electrical or infrared images—in one location | Yes*, assign images to assets and create work orders. Easily compare measurement types –whether mechanical, electrical or infrared images—in one location |
| Asset Tagging | Scan a QR code to automatically organize and file thermal images with Fluke Connect™ | Scan a QR code to automatically organize and file thermal images with Fluke Connect™ |
| IR-Fusion technology | AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image | AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image |
| Picture-In-Picture (PIP) | Yes | Yes |
| Display | 3.5" (8.9 cm landscape) touchscreen 640 x 480 LCD | 3.5" (8.9 cm landscape) touchscreen 640 x 480 LCD |
| Ergonomic design | Designed for one-handed use | Designed for one-handed use |
| Thermal sensitivity | 40 mk | 40 mk |
| Level and span | Smooth auto and manual scaling | Smooth auto and manual scaling |
| Fast auto-rescale in manual mode | Yes | Yes |
| Minimum span (in manual mode) | 3° C (4.5 °F) | 3°C (4.5 °F) |
| Minimum span (in auto mode) | 5°C (9.0 °F) | 5°C (9.0 °F) |
| Built-in digital camera (visible light) | Up to 5mp | Up to 5mp |
| Frame rate | 9 Hz or 27 Hz models | 9 Hz or 27 Hz models |
| Dew point calculation | Yes, on camera | 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.

Specifications continued

| Key Features | TiS75+ | TiS55+ |
|---|---|---|
| Data storage and image capture | | |
| Internal memory | ~500 images | ~500 images |
| External memory | ≥4 GB SD card (>1000 images) | ≥4 GB SD card (>1000 images) |
| Image capture, review, save mechanism | One-handed image capture, review, and save capability | One-handed image capture, review, and save capability |
| Image file formats | Non-radiometric BMP or JPEG or fully-radiometric is2 | Non-radiometric BMP or JPEG or fully-radiometric is2 |
| Memory review | Yes | Yes |
| Software | Fluke Connect software—full analysis and reporting software with access to the Fluke Connect | Fluke Connect software—full analysis and reporting software with access to the Fluke Connect |
| Analyze and store radiometric data on a PC | Yes | Yes |
| Export file formats with Fluke Connect software | is3, is2, BMP, GIF, JPEG, PNG, TIFF | is2, BMP, GIF, JPEG, PNG, TIFF |
| Voice annotation | Yes, 60 second maximum audio recording via Bluetooth Audio Headset Profile (HSP) connection to external device. | Yes, 60 second maximum audio recording via Bluetooth Audio Headset Profile (HSP) connection to external device. |
| IR-PhotoNotes | Yes. Up to 3 extra user-selectable visible light image capture to be included in IS2 file. | Yes. Up to 1 extra user-selectable visible light image capture to be included in IS2 file. |
| Text annotations | After IS2 capture, user can type in a note using on-screen keyboard. | After IS2 capture, user can type in a note using on-screen keyboard. |
| Video recording and formats | Standard and radiometric video. Up to 5 minutes recording length. avi and is3 | No |
| Remote control operations | Yes | No |
| Auto capture (temperature and interval) | Yes. User-selectable time interval for capturing IS2 or Jpeg files. | Yes. User-selectable time interval for capturing IS2 or Jpeg files. |
| Battery | | |
| Batteries (field-replaceable, rechargeable) | Lithium-ion rechargeable battery | Lithium-ion rechargeable battery |
| Battery life | ≥ 3.5 hours continuous without WiFi (Actual life depends on settings and usage) | ≥ 3.5 hours continuous without WiFi (Actual life depends on settings and usage) |
| Battery charging time | ≤2.5 hours to full charge | ≤2.5 hours to full charge |
| Battery charging system | Ti SBC3B Two-Bay Battery Charger or in-Imager charging. | Ti SBC3B Two-Bay Battery Charger or in-Imager charging. (does not come with two-bay battery charger) |
| AC operation | AC operation with included power supply, universal adapters included Output: 15 VDC, 2 A | AC operation with included power supply, universal adapters included Output: 15 VDC, 2 A |
| Power saving | User-selectable sleep and power off | User-selectable sleep and power off |
| Temperature measurement | | |
| Temperature range (not calibrated below -10 °C) | -20 °C to 550 °C (not calibrated below -10 °C) | -20 °C to 550 °C (not calibrated below -10 °C) |
| Accuracy | ±2 °C or 2 % (whichever is greater) at 25 °C ambient temperature | ±2 °C or 2 % (whichever is greater) at 25 °C ambient temperature |
| On-screen emissivity correction | Yes, “top ten” material list plus numerical adjustment between 0.01 and 1.00 | Yes, “top ten” material list plus numerical adjustment between 0.01 and 1.00 |
| On-screen reflected background temperature compensation | Yes | Yes |
| On-screen transmission correction | Yes | Yes |
| Color palettes | | |

Specifications continued

| Key Features | TiS75+ | TiS55+ |
|--------------------------------|--|--|
| Standard palettes | 6 | 6 |
| General specifications | | |
| Color alarms | Yes. User-selectable hot and cold point and internal/external range color alarms. Modifies palettization of IR image by limiting which pixels are drawn using palette colors based on the pixel temperature. | Yes. User-selectable hot and cold point and internal/external range color alarms. Modifies palettization of IR image by limiting which pixels are drawn using palette colors based on the pixel temperature. |
| Infrared spectral band | ~8-14µm | ~8-14µm |
| Operating temperature | -10 °C to 50 °C (14 °F to 122 °F) | -10 °C to 50 °C (14 °F to 122 °F) |
| Storage temperature | -20 °C to 50 °C (-4 °F to 122 °F) without batteries | -20 °C to 50 °C (-4 °F to 122 °F) without batteries |
| Relative humidity | 10 % to 95 % non-condensing | 10 % to 95 % non-condensing |
| Spot temperature | Center spot (unmovable) | Center spot (unmovable) |
| User-definable spot markers | Yes, 5 user-adjustable spot markers for a single pixel each. Position is adjustable. Temperature value for marker shown on screen. User can choose to switch display on/off for each marker. | Yes, 3 user-adjustable spot markers for a single pixel each. Position is adjustable. Temperature value for marker shown on screen. User can choose to switch display on/off for each marker. |
| User defined measurement boxes | Yes, 5 user-adjustable rectangles. Size and position are adjustable. Rectangle statistics shown on screen: Min, Max, Average temperature. User can choose to switch display on/off for each marker. | Yes, 3 user-adjustable rectangles. Size and position are adjustable. Rectangle statistics shown on screen: Min, Max, Average temperature. User can choose to switch display on/off for each marker. |
| Hard case | Rugged hard carrying case with soft transport bag, including adjustable strap | Rugged hard carrying case with soft transport bag, including adjustable strap |
| Safety standards | IEC 61010-1: Pollution Degree 2 | IEC 61010-1: Pollution Degree 2 |
| Electromagnetic compatibility | IEC 61326-1: Portable Electromagnetic Environment; IEC 61326-2-2 CISPR 11: Group 1, Class A | IEC 61326-1: Portable Electromagnetic Environment; IEC 61326-2-2 CISPR 11: Group 1, Class A |
| Australian RCM | RCM IEC 61326-1 | RCM IEC 61326-1 |
| US FCC | 47 CFR 15 Subpart C Sections 15.207, 15.209, 15.249 | 47 CFR 15 Subpart C Sections 15.207, 15.209, 15.249 |
| Vibration | 10 Hz to 150 Hz, 0.15 mm, IEC 60068-2-6 | 10 Hz to 150 Hz, 0.15 mm, IEC 60068-2-6 |
| Shock | 30 g, 11 ms, IEC 60068-2-27 | 30 g, 11 ms, IEC 60068-2-27 |
| Drop | Engineered to withstand 2 m drop | Engineered to withstand 2 m drop |
| Sized (H x W x L) | ~ (26.7 cm x 10.1 cm x 14.5 cm) ~ (10.5 in x 4.0 in x 5.7 in) | ~ (26.7 cm x 10.1 cm x 14.5 cm) ~ (10.5 in x 4.0 in x 5.7 in) |
| Weight (battery included) | ≤2.27 kg (5 lb) | ≤2.27 kg (5 lb) |
| Enclosure rating | IP54 | IP54 |
| Warranty | Two-years (standard) | Two-years (standard) |
| Recommended calibration cycle | Two-years (assumes normal operation and normal aging) | 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 | Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish |
| RoHS compliant | Yes | Yes |

Ordering information

FLK-TIS75+ 27HZ THERMAL IMAGER
FLK-TIS75+ 9HZ THERMAL IMAGER
FLK-TIS75+ 9HZ/CN THERMAL IMAGER
FLK-TIS55+ 27HZ THERMAL IMAGER
FLK-TIS55+ 9HZ THERMAL IMAGER
FLK-TIS55+ 9HZ/CN THERMAL IMAGER

Included

Infrared camera; ac power supply (including universal ac adapters); two-bay smart battery charger (TiS75+ only); rugged lithium ion smart batteries (TiS75+ includes 2 --TiS55+ includes 1); USB cable; 4 GB micro SD card; rugged, hard carrying case; soft transport bag; adjustable hand strap. Available by free download: desktop software and user manual.

Optional accessories

FLK-BLUETOOTH Bluetooth Headset
FLK-TI-TRIPOD3 Tripod Mounting Accessory
BOOK-ITP Introduction to Thermography Principles Book
FLK-TI-SBP3 Additional Smart Battery
FLK-TI-SBC3B Smart Battery Charger
TI-CAR CHARGER Car Charger

Visit 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 TiS55+ and TiS75+ infrared cameras are part of a growing system of connected test tools and equipment maintenance software. Visit the Fluke website to learn more about the Fluke Connect system.

Find out more at fluke.com



All trademarks are the property of their respective owners. WiFi or cellular service required to share data. Smartphone, wireless service and data plan not included with purchase. First 5GB of storage is free.

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

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

Fluke Corporation
 PO Box 9090, Everett, WA 98206 U.S.A.

For more information call:
 In the U.S.A. (800) 443-5853
 In Canada (800) 36-FLUKE
 From other countries +1 (425) 446-5500
www.fluke.com

©2020 Fluke Corporation.
 Specifications subject to change without notice.
 12/2020 200541-6013214a-en

Modification of this document is not permitted without written permission from Fluke Corporation.