

# 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.

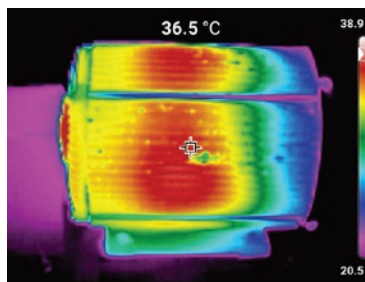
### Be proactive instead of reactive

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.

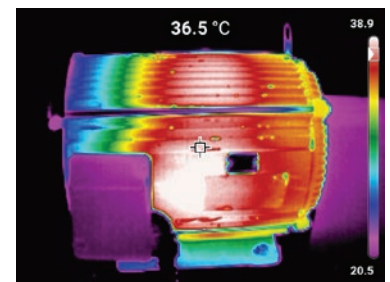
### Ditch the clipboard

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+
<b>Data storage and image capture</b>		
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.
<b>Battery</b>		
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
<b>Temperature measurement</b>		
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
<b>Color palettes</b>		

## Specifications continued

Key Features	TiS75+	TiS55+
Standard palettes	6	6
<b>General specifications</b>		
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

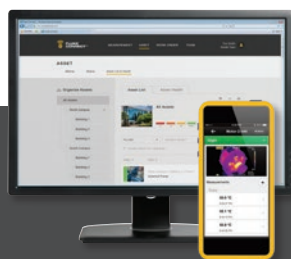
**FLK-TIS75+** 27HZ THERMAL IMAGER  
**FLK-TIS75+** 9HZ THERMAL IMAGER  
**FLK-TIS75+** 9HZ/CN THERMAL IMAGER  
**FLK-TIS55+** 27HZ THERMAL IMAGER  
**FLK-TIS55+** 9HZ THERMAL IMAGER  
**FLK-TIS55+** 9HZ/CN THERMAL IMAGER

### 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



### 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.



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.**

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