Technical Data

Fluke TiS55 PRO, TiS65 PRO, TiS75PRO Thermal Imager

Clear image with outstanding performance

The next generation Fluke TiS PRO series produces enhanced quality thermal images with advanced analytical tools to increase efficiency in the daily routine inspection processes. Simplifying the process with profile creation for faster measurement start up, QR code asset tagging, transfer images wirelessly and standardised report management.

Enhanced performances for detailed analysis

The robust quality lens with SuperResolution mode enables user to achieve high image quality. The models are designed for various scenarios such as equipment maintenance, R&D and quality control.

Simplify complex tasks with one-click operations

Just 4 steps to help you efficiently complete inspection and reporting

Step 1: Select pre-saved measurement parameters

For scenarios or critical equipment that require frequent testing, the quick Action button enables instant access to the saved test parameters, ensuring consistent test procedures every time and reducing setup time.

Step 2: Scan the QR code for automatic naming

The thermal imager can scan the QR code on the asset to automatically assign the asset identity to the captured thermal images. The files are quickly sorted out which greatly reduce the operation time.

Step 3: Transfer thermal images wirelessly

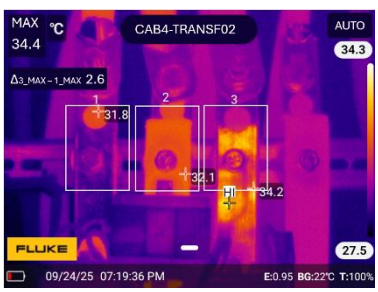
Thermal images can be transferred wirelessly to a mobile phone or PC without the need to install any software application. Any problems found on site can be reported timely.

Step 4: Automatic reporting with one-click

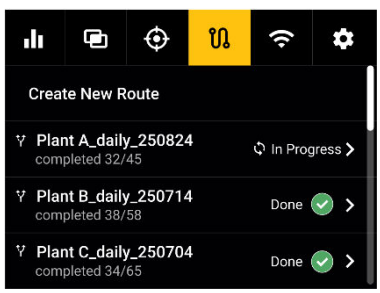
The Fluke Connect Express analysis software allows you to edit thermal images, analyse temperature trends, generate report with a single click, and customise report templates to support various types of inspection jobs.

Route-based Inspection of assets

With built-in route inspection function, pre-set inspection routes help track inspection progress in real-time to avoid missed inspections. This offers a new digitised option for scenarios where QR codes do not work.



Automatic 3-phase maximum temperature difference calculation with one-click



Select an inspection route and check the progress

Specifications

Model	TiS55 PRO	TiS65 PRO	TiS75 PRO
Key Features			
Infrared resolution	288 x 216 (62,208 pixels)	320 x 240 (76,800 pixels)	384 x 288 (110,592 pixels)
SuperResolution	576 x 432	640 x 480	768 x 576
Detector type	Uncooled focal plane infrared detector		
Spectral response	8 to 14 µm		
Field of view	42° x 32°	42° x 32° or 25° x 19°	
IFOV	2.50 mRad	42° : 2.29 mRad 25° : 1.36mRad	42° : 1.91 mRad 25° : 1.14mRad
Minimum focus distance	0.1m	42° : 0.1m 25° : 0.15m	
Focus system	Manual focus + focus free		
Agile Focus	Yes		
Digital Zoom	1 – 4x		
Wireless connectivity	Yes, transfer thermal images directly by wireless to mobile phones or PCs		
Standard software: Fluke Connect Express	Yes, functions such as thermal image analysis, historical trend generation, custom reports, and inspection management supported		
Asset tagging	Yes, name thermal images automatically by scanned QR codes or barcodes and save them as asset tags for thermal images		
IR-Fusion technology	Blend continuous 0 % to 100 %. 1% step for adding visible details to infrared images		
Picture-in-Picture (PIP)	Yes		
Display screen	3.5” (8.9 cm landscape) Touchscreen 640 x 480 LCD		
Ergonomic design	Designed specifically for one-handed use		
Thermal sensitivity	<= 40mk (0.04 ℃)		
Temperature level and span	Smooth auto and manual scaling		
Fast auto-rescale in manual mode	Yes		
Minimum span (in manual mode)	3 ° C		
Minimum span (in auto mode)	3 ° C		
Built-in digital camera (visible light)	13 mp		
Frame rate	9 Hz		
Dew point calculation	No		Yes
Preset shortcut keys	6		
Temperature Measurement			
Temperature span	-20 ℃ to 550 ° C	-20 ℃ to 600 ° C	-20 ℃ to 650 ° C
Temperature range	-20 ℃ to 150 ° C 0 ℃ to 550 ℃	-20 ° C to 150 ° C 0 ℃ to 600 ℃	-20 ° C to 150 ° C 0 ℃ to 650 ℃
Accuracy	±2 ° C or 2 %, whichever is greater (18 to 28 ° C ambient temperature)		
On-screen temperature correction	Emissivity, background temperature, measurement distance and transmission correction supported		

Specifications (Continued)

Model	TiS55 PRO	TiS65 PRO	TiS75 PRO
Standard palettes	10 Gray, Ironbow, High Contrast, Amber, Hot Metal, Blue-Red, Amber Inverted, Gray Inverted, Rainbow, Steps		
Spot temperature	Center spot (unmovable)		
Auto high/low temperature capture	High and low temperature points marked and tracked automatically		
User-definable markers	Points: 5 Lines: 5 Areas: 5		
Custom temperature difference calculation	3		
3-phase maximum temperature difference calculation	Yes		
Image mode	Infrared, visible light, PIP, visible light and infrared fusion		
Audible alarm	Alarm objects: highest temperature point, lowest temperature point, center point, custom point or line or area, 3-phase maximum temperature difference, custom temperature difference Alarm conditions: Above the temperature, below the temperature		
Color alarm	Yes, above the temperature, below the temperature, within the temperature span, outside the temperature span		
Preset measurement parameters (profile)	Up to 50 profiles can be saved		
Data Storage and Image Capture			
Storage	Standard with a 64 GB SD card Expandable up to 1 TB		
Image capture, review, save mechanism	One-handed image capture, review, and save capability		
Image file formats	JPEG (with temperature data)		
Memory review	Yes		
Voice annotation	Yes, 60 s maximum audio recording via a Bluetooth Audio Headset		
IR-PhotoNotes	Yes. Up to 3 extra visible light images captured can be included in JPEG files.		
Text annotations	Yes, multiple languages supported		
Severity annotations	Yes, annotations for 4 severity levels: normal, moderate, severe, and extreme		
Video recording and formats	Standard video format: mp4		Standard video format: mp4 Videos with temperature data supported
Fully-radiometric infrared data streaming	No		Connection with a PC to transfer fully-radiometric infrared data streaming in real time
Auto Capture (temperature and interval)	Yes, user-selectable time interval for capturing images.		
Route Inspection Function			
Create and manage inspection routes	Yes, use the Fluke Connect Express software		
Start, execute and manage inspection routes	Yes, use the thermal imager		
Thermal images archived automatically according to inspection routes	Yes		

Specifications (Continued)

Model	TiS55 PRO	TiS65 PRO	TiS75 PRO
Automatic reporting and trend summaries	Yes		
Battery			
Batteries (field-replaceable, rechargeable)	Lithium-ion rechargeable battery		
Battery life	>5 hours (Actual life depends on settings and usage)		
Battery charging time	< 4 hours to full charge		
Battery charging system	Ti SBC3B two-bay battery charger used or charged via the Type-C port		
External power supply	AC operation through the included power adapter with the output: 15 VDC, 3 A		
General Specifications			
Laser	Yes		
Flashlight	Yes		
Type-C port	Yes, charging and data transfer supported		Yes, charging, data transfer, remote display and control supported
Operating temperature	-10 ° C to 50 ° C		
Storage temperature	-20 ° C to 60 ° C, without batteries		
Relative humidity	10 % to 95 % non-condensing		
Safety standard	IEC 61010-1: pollution degree 2		
Electromagnetic combability	IEC 61326-1: Industrial Electromagnetic Environment; CISPR 11: Group 1, Class A		
Australia RCM	RCM IEC 61326-1		
Radio frequency (WIFI and Bluetooth)	2.4 GHz		
Radio output power (WIFI and Bluetooth)	<100 mW		
Laser	IEC 60825-1, Class 2; 650 nm; <1 mW		
Drop	Engineered to withstand 2 m drop		
Ingress protection	IEC 60529: IP52		
RoHS3 Directive	Yes		
Other Specifications			
Size (L x H x W)	~ (26.7 cm x 10.1 cm x 14.5 cm)		
Weight (battery included)	950 g		
Supported languages	Simplified Chinese, Traditional Chinese, English, Korean, Japanese		
Warranty	2 years		
Recommended calibration period	2 years		

Ordering Information

TiS55PRO 9Hz/42 THERMAL IMAGER
TiS65PRO 9Hz/42 THERMAL IMAGER
TiS65PRO 9Hz/25 THERMAL IMAGER
TiS75PRO 9Hz/42 THERMAL IMAGER
TiS75PRO 9Hz/25 THERMAL IMAGER

Included

The Thermal Imager
Li-ion batteries (2 pcs)
2-Bay battery charging base
Charging adapter
SD card
Soft transport bag
Adjustable hand strap
Hard carrying case
Available by free download: Fluke Connect Express software

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