

TECHNICAL DATA

Fluke TiX885 and TiX875

Expert Series Thermal Imaging Cameras with GPS



- This Series features 640 × 480 infrared pixels: Clear and sharp thermal image, insight into temperature and changes. 1280 × 960 SuperResolution can also be supported for TiX885.
- Up to 30 Hz frame rate (TiX885 and TiX875) for efficient testing: Smoothly observing the target temperature rise and drop process, no lag as you walk.
- Flexible operation: 180 ° rotatable lens, the lens angle can be adjusted at any time; 5.5-inch OLED touch screen to achieve efficient and convenient operation; lithium battery supports > 3.5 hours of battery life, no pressure in outdoor testing.
- Reliable tool for industrial O&M: Identify devices, organise test data and mark GPS location through QR code (TiX885).
- Excellent assistant for experimental R&D: Record fully-radiometric IR video streaming + data streaming (TiX885, TiX875), which can also be imported into a PC for secondary analysis via the SmartView IR software.
- Support up to 1200 °C (TiX885) to meet requirement of high temperature testing for various industries.

IR Resolution

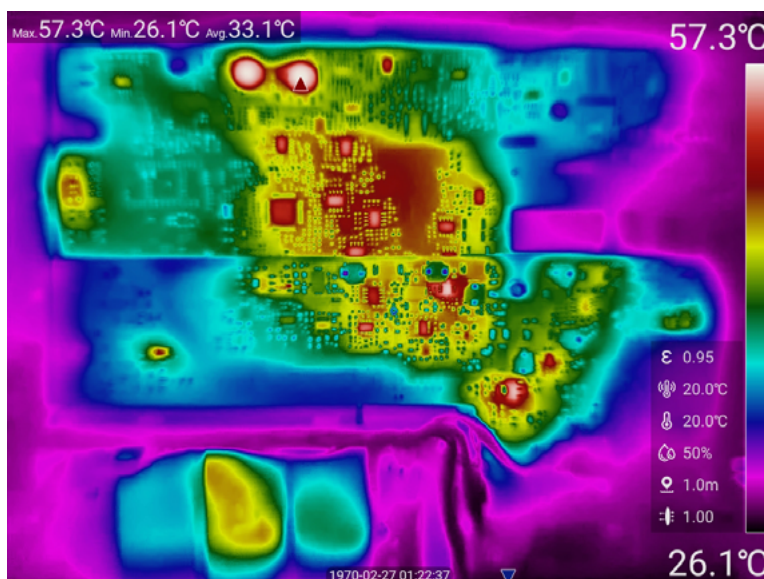
640 x 480

SuperResolution

- TiX885 Enhanced to 1280 x 960 pixels

Thermal Sensitivity*

- TiX885 <25 mK @ 30 °C
- TiX875 <30 mK @ 30 °C



Specifications

	TiX875	TiX885
Detector		
IR Resolution	640 × 480	
SuperResolution	-	Enhanced to 1280 × 960 pixels
Thermal Sensitivity*	<30 mK @ 30 °C	<25 mK @ 30 °C
Field of View (FOV)	25° × 19°	
Spatial Resolution (IFOV)	0.68 mRad	
Digital Zoom	1 to 25x	1 to 35x
Detector Type	Focal Plane Array (FPA), Uncooled Infrared Detector	
Spectral Response	7 to 14 µm	
Lens Aperture	F 1.0	
Lens Recognition	Auto	
Minimum Focus Distance	0.2 m	
Focus System	Auto/Manual	
Frame Rate	30 Hz	
Measurement and Analysis		
Temperature Range	-40 °C to 700 °C	-40 °C to 1200 °C
Temperature Measurement Range	-40 °C to 150 °C 0 °C to 350 °C 0 °C to 700 °C	-40 °C to 150 °C 0 °C to 350 °C 0 °C to 700 °C 300 °C to 1200 °C
Temperature Accuracy	±2 °C or ±2%, whichever is greater (normal temperature, 23 °C typical)	
High/Low-Temperature Capture	Yes	
Reference Temperature Compensation	Yes. The full-screen and measurement mark temperature are displayed as the difference between the actual temperature and the fixed temperature	
Automatic Temperature Difference Calculation	Calculation of the difference between measurement marks or between a measurement mark and the fixed reference temperature	
Custom Temperature Measurement Point	20 points	20 points
Custom Temperature Measurement Area	20 areas (circle or rectangle)	20 areas (circle or rectangle)
Line Temperature Measurement	20 lines	20 lines
Temperature Measurement Methods	The highest and lowest temperature can be set within an area, and the highest/lowest temperature point can be automatically located	
Correction Settings	Emissivity, Reflected Temperature, Humidity, Ambient Temperature, Test Distance, Transmittance	
Full-Screen Emissivity Correction	0.01 to 1.00, built-in common material emissivity table	
Areal Emissivity Correction	Yes	
Analysis in the Imager	Yes	
Analysis Software	SmartView IR	
Supported Languages	Simplified Chinese/English	
Image Display		
Display	OLED touchscreen, 170° visual range	
Display Size	5.5 inches	
Display Contrast	100000:1	
Display Resolution	1920 × 1080 pixels, 1080P UHD display	
Digital Image Enhancement	Yes	
Settings for On-Screen Display (OSD)	Yes. Users can define OSD, such as the maximum, minimum, average temperature, full-screen emissivity and reflected temperature	
Settings for Information Display of Temperature Measurement Mark	Yes. Each temperature measurement mark can be set separately, such as emissivity	
Built-in Digital Camera	Yes	
LED Torch/Flashlight	Yes	
Picture-in-Picture (PIP)	Yes	
Colour Palettes	15	
Manual Image Adjustment	Yes	
Auto Image Adjustment	Yes	
Minimum Temperature Span (in manual mode)	2 °C	
Minimum Temperature Span (in auto mode)	4 °C	

* Under best case scenario

Video		
Fully-Radiometric Infrared Video Recording	Recorded to the Imager and PC	Recorded to the Imager and PC
Fully-Radiometric Infrared Video Recording (Frame Rate Adjustable)	1 to 12 Hz	1 to 12 Hz
Fully-Radiometric Infrared Video Streaming	USB 2.0	USB 2.0
Non-radiometric Infrared Video Streaming (HDMI output)	Transmission via HDMI	
Auto Capture	Interval of 1 s to 60 min 59 s	
Professional Functions		
Colour Alarm (Isotherm)	Yes. High temperature alarm, low temperature alarm	
QR Code Recognition	-	QR code supported
Voice Annotation	Yes. 200 s of voice annotation for every image	
Text Annotation	Yes	
Visible Light Image Association Technology	Yes	
Storage and Transfer		
Image Viewing	Thumbnail view navigation and view selection	
Storage Medium	Built-in 16G flash + 128 high-speed SD card	
SD Card	Included	
IR Image File Format	Standard JPEG, including measurement data, which meets the data format verification requirements of the State Grid for Infrared Imagers	
Video File Format	.MP4.IS5	
Visible Image File Format	Standard JPEG format	
Audio	Yes	
Transfer Interface	USB Type-C, HDMI, SD card, Bluetooth	
Bluetooth Transfer	Yes. The saved files can be transferred to a PC via Bluetooth.	
GPS	-	Yes
Remote Display Viewing	Yes. View thermal video streaming on a PC or a display terminal by connecting to the SmartView IR software on a PC via USB, or connecting to a display terminal via HDMI	
Remote Control Operation	Yes. Through the SmartView IR Software	
USB	USB 2.0	
Antenna	Internal	
Bluetooth Transfer		
Frequency	2400 MHz to 2483.5 MHz	
Output Power	<100 mW	
Laser		
Laser Standard	IEC 60825-1, Class 2; 650nm; <1mW	
Power and Environment		
Battery Type	Li-ion batteries (3 pcs)	
Battery Life	> 3.5 hrs for continuous use @ ambient temperature of 25 ° C	
Weight	1550 g (with battery)	
Dimensions	148 mm × 204 mm × 86 mm	
Certification Standards	IEC 61326-1: Industrial Electromagnetic Environment; CISPR 11: Group 1, Class A	
Tripod Mounting Base	UNC 1/4"-20 Standard Tripod Mounting Thread	
Warranty	2 years	
Recommended Calibration Period	2 years (assuming normal operation and aging)	

Optional Lens

	Standard Lens	Tele-photo lens 7° TIX800 4X TELE, TIX800 7C TELE LEN	Tele-photo lens 12° TIX800 2X TELE, TIX800 12C TELE LEN°	Wide lens 46° TIX800 2X WIDE, TIX800 46C WIDE LEN	Macro lens 50um TIX800 MACRO, TIX800 50UM MACRO LEN	Macro lens 25um TIX800 MACRO, TIX800 25UM MACRO LEN
		5516646	5516631	5516654	5516668	5516679
Lens Material	Germanium	Germanium	Germanium	Germanium	Germanium	Germanium
IFOV (Spatial resolution) mrad	0.68mrad	0.22mrad	0.34mrad	1.36mrad		
Field of View (FOV) ° H x ° V	25° x 19°	8° x 6°	12° x 9°	50° x 39°	50um	25um
Minimum Focus Distance	0.5m	3m	2m	1m	Fixed focus 77.5mm	Fixed focus 9.4mm
Focal Length	25mm	-77.4mm	50mm	13mm		



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