Technical Data

Fluke TiX1060 Thermal Imager





- **Spatial Resolution: 0.43 mRad**
- **Resolution: 1024×768**
- **Super Resolution: 2048x1536**
- **Thermal Sensitivity: <30 mK @30 ℃**
- **Field of View: 25° x 19°**
- **Temperature Range: -40 ℃ to 2000 ℃**

Fluke's New TiX1000 Expert Series Thermal Imager

The new 1024x768 resolution Fluke TiX1060 thermal imager has superior image quality and is well suited for R&D engineers and scientific researchers. With frame rate up to 25Hz, it retains more details and meets the testing needs of capturing fast changing temperature.

For outdoor applications, the TiX1060 comes with auto-focus technology, allowing user to focus on target from a far distance. Coupled with 1 to 35x continuous digital zoom, user can view small details on distant targets clearly.

With a full 180-degree articulating lens, the Fluke TiX1060 Infrared Camera allows thermographers to easily navigate over, under, and around objects to preview and capture images with ease. Combined with the Super Resolution technology, the TiX1060 can achieve image resolution of 2048 × 1536 pixels.

It also comes with the Fluke SmartView® IR software, which provides a suite of advanced tools to view, optimize, annotate, and analyze infrared images, and generate fully customizable professional reports.

HD Image Quality

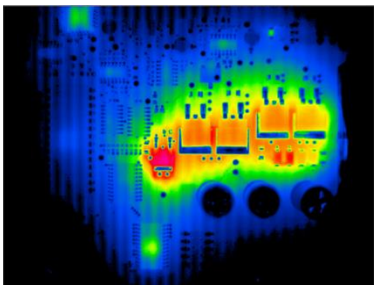
- 1024×768 resolution supported by uncooled infrared detectors.
- <30mK thermal sensitivity to capture clear image.
- Manual/auto focus technology for accurate focus and capturing of high-quality image efficiently.

Unmatched capturing flexibility

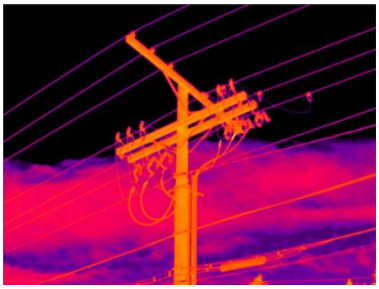
- Full 180-degree articulating lens to change measurement angles.
- 5.5-inch OLED touchscreen for efficient and convenient operation.
- Lithium batteries offering > 3.5 hours of battery life for convenient outdoor usage.

Advanced onboard analytics & streaming

- SmartView IR PC software for R&D applications.
- Video streaming output to visualize the smallest temperature changes on a secondary display.



Circuit board thermal distribution



Electrical connection of transmission tower

Specifications

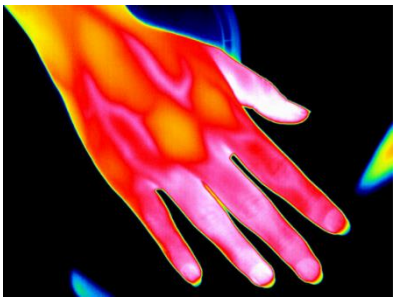
Detector	
IR Resolution	1024 x 768
Super Resolution	Yes (enhanced to 2048 x 1536 pixels)
Thermal Sensitivity (NETD)	<30 mK @ 30 ℃
Field of View (FOV)	25° x 19°
Spatial Resolution (IFOV)	0.43 mrad
Digital Zoom	1 to 35x continuous zoom
Detector Type	Focal Plane Array (FPA), Uncooled Infrared Detector
Detector Pixel Spacing	17 µm
Spectral Response	8 to 14 µm
Lens Aperture	F1.0
Lens Recognition	Auto
Minimum Focus Distance	0.5 m
Focus System	Auto / Manual
Frame Rate	13 Hz, full window; 25 Hz, 1/2 window
Measurement and Analysis	
Temperature Range	-40 ℃ to 700 °C（-40 ℃ to 150 ℃; 0 ℃ to 350 ℃; 0 ℃ to 700 ℃） High temperature option: expanded to 2000 ℃ (300 ℃ to 2000 ℃)
Temperature Accuracy	±1 °C or 1 % of rdg (whichever is greater), at -10 ℃ to 150 ℃ ±2 °C or 2 % of rdg (whichever is greater), at other temperature ranges*
Auto 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
Point Temperature Measurement	10 points
Area Temperature Measurement	5 areas (rectangle or circle)
Line Temperature Measurement	10 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 (Background Temperature), Transmittance, Humidity, Ambient Temperature, Test Distance, Atmospheric Transmission Correction
Full-Screen Emissivity Correction	0.01 to 1.00 in steps of 0.01, built-in common material emissivity table
Areal Emissivity Correction	Yes
Analysis in the Imager	Perform point, area, and line temperature analysis on saved thermal images
Analysis Software	Standard SmartView IR software
Yes	English/ Simplified Chinese

Specifications

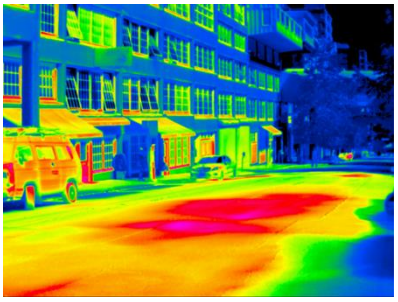
Image Display	
Display	OLED touchscreen, 170° visual range
Display Size	5.5 inches
Display Contrast	100000 : 1
Display Resolution	1920 x 1080 pixels, 1080P Ultra HD display
Digital Image Enhancement	Yes
Settings for On-Screen Display (OSD)	Yes. Users can define OSD, such as the maximum, minimum, average 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	5.0 MP, auto focus
LED Torch/Flashlight	Yes
Picture-in-Picture (PIP)	Yes
Color Palettes	30 palettes (15 standard palettes, 15 inverted palettes)
Manual Image Adjustment	Yes
Automatic Image Adjustment	Yes
Minimum Temperature Span (in manual mode)	2 ℃
Minimum Temperature Span (in auto mode)	4 ℃
Video	
Fully radiometric infrared video recording	Recorded to the Imager and PC
Fully radiometric infrared video recording (frame rate adjustable)	Adjustable frame rate range: 1 to 12Hz
Fully radiometric infrared video streaming	Transfer via USB 2.0
Non-Radiometric IR Video Streaming	Transmission via HDMI
Auto Capture	Customized frame rate or interval
Professional Functions	
Color Alarm (Isotherm)	Yes
Audible Alarm	High/ Low temperature alarm
Automatic naming of thermal images	QR code supported
Voice Annotation	Yes. 200 s of voice annotation for every image
Text Annotation	English/ Simplified Chinese/ Numbers

Specifications

Storage and Transfer	
Image Viewing	Thumbnail view navigation and view selection
Storage Medium	Built-in 16GB flash + 128GB high-speed SD card
SD Card	Yes
IR Image File Format	Standard JPEG format, including measurement data
Video File Format	.mp4 .IS5
Visible Image File Format	Standard JPEG format, automatically associate with infrared images
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	GPS location information is automatically added to each static image captured outdoors
Remote Display Viewing	Yes. View thermal video stream on your PC or a display terminal. (Connect to the SmartView IR software on PC via USB, or connect to a display terminal via HDMI)
Remote Control Operation	Yes. Through SmartView Software
USB Function	Transfer fully radiometric thermal image video stream to a PC; read the Imager's internal flash memory data; read SD card data
USB	USB 2.0
Antenna	Internal
Power and Environment	
Battery Type	3 rechargeable Li-ion batteries
Battery Life	> 3.5 hours for continuous use (ambient temperature of 25 ℃)
Weight	1822g (with battery)
Dimensions	151 mm x 214 mm x 92 mm
Rotatable Lens	180° rotatable lens
Test Standards	EN 61326-1 EN 301489-1/-17 EN 300328 EN 303413 IEC 301489-19 EN 60825-1 FCC 47 CFR Part 15 KS C 9832:2019 KS C 9835:2019
Tripod Mounting Base	UNC 1/4"-20 Standard Tripod Mounting Thread
Warranty	2 years for the Imager, 10 years for the detector
Recommended Calibration Period	2 years (assuming normal operation and aging)



Vascular distribution on a hand back



Leak in a heating system

Specifications

Optional Lens					
	Standard Lens	Tele-photo lens 9° TIX1000 4X TELE,TIX1000 9C TELE LEN	Tele-photo lens 12° TIX1000 2X TELE,TIX1000 12C TELE LEN°	Wide lens 46° TIX1000 2X WIDE,TIX1000 46C WIDE LEN	Macro lens 50um TIX1000 MICRO, TIX1000 50UM MICRO LEN
		5343468	5361598	5361604	5361619
Measurement Range	-40°C to 2000°C	-40°C to 700°C	-40°C to 700°C	-40°C to 700°C	-40°C to 150°C
Lens Material	Germanium	Germanium	Germanium	Germanium	Germanium
IFOV (Spatial resolution) mrad	0.43mrad	0.16mrad	0.20mrad	0.85mrad	/
Field of View (FOV) ° H x ° V	25° x 19°	9.5° x 7.2°	12.0° x 9.1°	50.0° x 36.9°	50um
Minimum Focus Distance	0.5m	3m	1.3m	0.1m	Fixed focus 97mm
Focal Length	39.6mm	102.6mm	81.3mm	20.6mm	/

Accessories

- Fluke TiX1060 Thermal Imager (standard lens)
- Rechargeable Li-ion batteries (3 pcs)
- Power Adapter
- Battery charger
- Lens Cover
- USB Cable
- HDMI Cable
- High-Speed SD Card
- Card Reader
- Safety Information
- Quick Reference Guide
- Hand Strap
- Neck Strap
- Hard Carrying Case

Optional lens

- TIX1000 4X TELE,TIX1000 9C TELE LEN
- TIX1000 2X TELE,TIX1000 12C TELE LEN
- TIX1000 2X WIDE,TIX1000 46C WIDE LEN
- TIX1000 MICRO,TIX1000 50UM MICRO LEN



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