TECHNICAL DATA

Fluke TiX1000 Infrared Camera

The TiX640 gives you 32x on-camera digital zoom for spectacular, detailed infrared images from a safe distance.

R&D testing of material absorbency and moisture permeation.

Key features

- 1024 x 768 infrared camera with large 5.6-inch high resolution LCD screen
- Provides temperature measurements from -40°C to +1200°C (-40°F to 2192°F)
- Offers a high temperature option for measurements up to 2000 °C (3632 °F)
- Subject to Export Control

Product overview: Fluke TiX1000 Infrared Camera

Fluke TiX1000 with 1024 x 768 resolution enables you to see even the smallest details
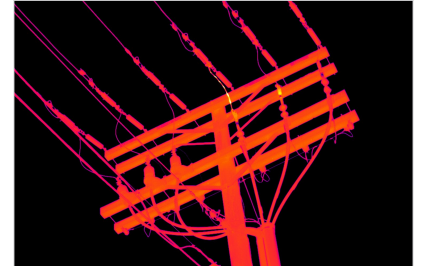
The TiX1000 offers all the features of the TiX660 but delivers 1024 x 768 resolution. You can use the 32x on-camera digital zoom to get spectacular, detailed infrared images from a safe distance. And you can call on LaserSharp Auto Focus, auto focus, manual, or EverSharp multifocal recording to save time while get consistently accurate images. With the large 5.6 inch high resolution LCD screen you can see more detail in every image and get high measurement accuracy with 1024 x 768 resolution.

To further enhance your ability to see details from long distances, the TiX1000 provides 4x the on-camera pixels in Super Resolution mode to give you 2048 x 1536 (3,145,728 pixels) images. You can work from safer distances and inspect areas that you could not get close to any other way and still get spectacular, detailed infrared images.
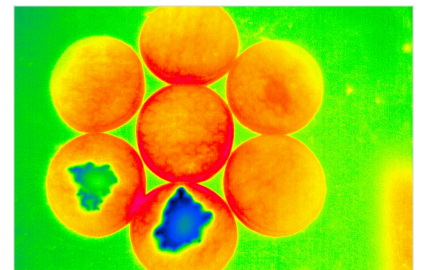
For added versatility, the TiX1000 is also compatible with seven optional field installable lenses (2x and 4x telephoto lenses, two wide angle lenses, three macro lenses) in addition to the standard lens.

8 optional lens for maximum versatility.

Other useful features:

- Features 32x on-camera digital zoom to allow you to get close up shots from a

safe distance

- Provides 4x the pixel data with SuperResolution to create a 2048 x 1536 (3,145,728 pixels) image (in software)
- Offers multiple image transfer protocols
- Features the most advanced focus options available for consistently in focus images: Auto focus, manual, and EverSharp multifocal recording all on one camera
- Features LaserSharp® Auto Focus to produce consistently in-focus images for more accurate temperature measurements
- Includes a built-in laser distance meter that calculates the distance to your designated target up to 30 meters (100 feet)
- Provides the sharpest ever IR-Fusion® images with an 8 MP visible light camera
- Offers versatile viewing options for in-field viewing of images with viewfinder for outdoor use.
- Enables quick and easy in-field analysis with IR-Fusion® blending technology and advanced touchscreen functions including continuous level and span adjustment and filter mode for improved thermal sensitivity
- Features light and ergonomic handling with neck and hand strap for all day use
- Offers user defined programmable buttons to personalize for quick access to most used features.
- Allows sub-windowing to 240 Hz frame rate for advanced applications (add-on option)

Specifications: Fluke TiX1000 Infrared Camera

Image Quality	
IFOV (spatial resolution)	0.6 mRad
Image resolution (pixel)	1024 x 768 (786,432 pixels)
	2048 x 1536 (3,145,728 pixels) (SuperResolution mode)
Frame rate (@ max. image resolution)	30 and 9 Hz
SuperResolution & Dynamic SuperResolutin (resolution enhancement)	Yes, MicroScan technology quadruples IR measurement pixels
Subwindowing modes available - subwindowing options are not available on 9 Hz models: (add on at time of order)	Option 1: 640 x 480 (60 fps) Option 2: 384 x 288 (120 fps) Option 3: 1024 x 96 (240 fps)
Field of View (FOV) w/standard 30mm lens	32.4° x 24.7°
Thermal sensitivity (NETD)	≤ 0.05 °C at 30 °C target temp (50 mK)
Spectral range	7.5 µm to 14 µm
Wireless Connectivity	
Fluke Connect® compatible	No
IR-Fusion® Technology	
AutoBlend™ mode	Yes

Viewing modes	Picture-in-picture, continuous blending, color alarms (above and below user defined temperatures)

Focus System

LaserSharp® Auto Focus	Yes
Auto focus	Yes
Manual focus	Yes, with the touch of a finger for tighter views
EverSharp multifocal recording	Yes, Multifocal recording captures images from different focal distances and combines them into one image displaying each object sharply for the best image quality

Temperature Measurement

Range	-40 °C to +1200 °C (-40 °F to 2192 °F), High temperature option - request at time of order: up to 2000 °C (3632 °F)
Accuracy	± 1.5 °C or ± 1.5 %
Correction functions	LDC™ - Laser rangefinder based distance correction, emissivity (manual or material table)
	Transmissivity, ambient temperature, humidity (option)

Data Storage and Image Capture

Image/video storage	SDHC memory card
Interfaces for image/data transfer	Supported in camera data ports: Image transfer: SD card, USB 2.0, video output DVI-D (HDMI). GigE vision and RS232 available in 2015
	SmartView® software: SD card. USB 2.0, GigE Vision and RS232 available in 2015

General Specifications

Laser pointer	Yes, laser class: 2
Laser distance meter	Accuracy: ± 1.5 mm Range: 70 m (230 ft) Wavelength: 635 nm (red) Laser class: 2
Display	Extra-large 5.6" color TFT display, 1280 × 800 pixel resolution, Suitable for daylight operation
Geo-localization	Built-in GPS for geo-referencing
Digital visible light camera	Up to 8 megapixel resolution for image and video recording
Digital zoom	Up to 32x digital zoom
Text annotation	Yes
Voice annotation	Yes
Audio	Integrated microphone and loudspeaker for voice annotations
A/D conversion	16 bit

Power supply	External: 12 VDC … 24 VDC Battery: Standard Li-Ion video camera battery
Replaceable Smart Batteries with LED level indicator	Two
Operating temperature	-25 °C to +55 °C (-13 °F to 131 °F)
Storing temperature	-40 °C to +70 °C (-40 °F to 158 °F)
Humidity	Relative humidity 10 % to 95 %, non-condensing
Shock	Operational: 25G, IEC 68-2-29
Vibration	Operational: 2G, IEC 68-2-6
Protection class	IP54
Ergonomics	Camcorder w/ handle
Viewfinder	Tiltable LCoS color viewfinder display, 800 × 600 pixel resolution
Dimensions (with standard 1.0/30 mm lens)	210 × 125 × 155 mm (8.25 x 4.9 x 6.1 in)
Weight (with standard 1.0/30 mm lens)	1.95 kg (4.3 lb)
Measurement functions (selection)	Multiple measurement spots & Regions of Interest (ROIs), hot/cold spot detection, isotherms, profiles, differences
Automatic functions (selection)	Focus, image, level, range, NUC, lens recognition, image optimization, alarm sequence
SmartView® software	Yes
Supported languages	Czech, Dutch, English, Finnish, French, German, Hugarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese and Turkish.
Warranty	2 years

Ordering information

FLK-TiX1000 30 Hz

Fluke TiX1000 Infrared Camera 30 Hz (1024x768)

Includes:
- Two rechargeable batteries
- Battery charger and adapter
- AC adapter
- SD card reader
- FC SD card for Fluke Connect™ (not available in all countries)
- Protective lens cap
- Hand and neck straps
- Carrying case
- Warranty card and safety instructions
- Calibration certificate
- Printed manuals in English and Simplified Chinese

FLK-TiX1000 9 Hz

Fluke TiX1000 Infrared Camera 9 Hz (1024x768)

Includes:
- Two rechargeable batteries
- Battery charger and adapter
- AC adapter
- SD card reader
- FC SD card for Fluke Connect™ (not available in all countries)
- Protective lens cap
- Hand and neck straps
- Carrying case
- Warranty card and safety instructions
- Calibration certificate
- Printed manuals in English and Simplified Chinese

https://www.fluke.com/en-us/product/thermal-cameras/tix1000