

TECHNICAL DATA

# Fluke TiX640 Infrared Camera



## Key features

- 640 x 480 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)
- Features 32x on-camera digital zoom to allow you to get close up shots from a safe distance

## Product overview: Fluke TiX640 Infrared Camera

**TiX640 Infrared camera with advanced multi-focus features help you see what you are missing**

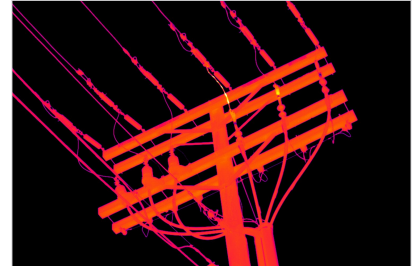
The TiX640 gives you 32x on-camera digital zoom for spectacular, detailed infrared images from a safe distance. It also offers auto focus, manual, and EverSharp multifocal recording to save you time and provide consistently accurate images. Plus, you can see more detail in every image on the large 5.6 inch high resolution LCD screen and get high measurement accuracy with 640 x 480 resolution.

To further enhance your ability to see details from long distances, the TiX640 provides 4x the on-camera pixels in Super Resolution mode to give you 1280 x 960 (1,228,800 pixels) images (in software). 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.

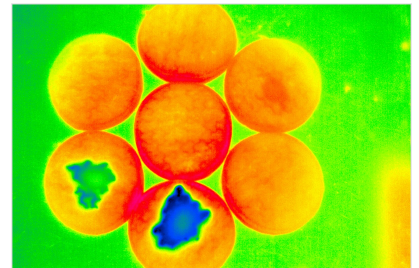
For added versatility the TiX640 is compatible with seven optional field installable lenses (2x and 4x telephoto lenses, two wide angle lenses, three macro lenses) in addition to the standard lens.

### Other useful features:

- Offers multiple image transfer protocols
- Features the most advanced focus options available for consistently in focus



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.



8 optional lens for maximum versatility.

- images: Auto focus, manual, and EverSharp multifocal recording all on one camera
- Provides the sharpest ever IR-Fusion® images with an 8 MP visible light camera.
  - Provides 4x the pixel data with SuperResolution to create a 1280 x 960 resolution image (in software).
  - 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 TiX640 Infrared Camera

Image Quality	
IFOV (spatial resolution)	0.8 mRad
Image resolution (pixel)	640 x 480 (307,200 pixels)
Frame rate (@ max. image resolution)	60 and 9 Hz
SuperResolution & Dynamic SuperResolution (resolution enhancement)	No
Subwindowing modes available - subwindowing options are not available on 9 Hz models: (add on at time of order)	Option 1: 384 x 288 (120 fps) Option 2: 640 x 120 (240 fps)
Field of View (FOV) w/standard 30mm lens	30.9° x 23.1°
Thermal sensitivity (NETD)	≤ 0.03 °C at 30 °C target temp (30 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	No
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
<b>Temperature Measurement</b>	
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	Emissivity (manual or material table)
	Transmissivity, ambient temperature, humidity (option)
<b>Data Storage and Image Capture</b>	
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
<b>General Specifications</b>	
Laser pointer	Yes, laser class: 2
Laser distance meter	None
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	One
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
Viewfinder	None
Dimensions (with standard 1.0/30 mm lens)	206 x 125 x 139 mm (8.1 x 4.9 x 5.5 in)
Weight (with standard 1.0/30 mm lens)	1.4 kg (3.2 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, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese and Turkish.
Warranty	2 years

## Ordering information



### **FLK-TiX640 60 Hz**

Fluke TiX640 Infrared Camera 60 Hz (640x480)

Includes:

- Rechargeable battery (1)
- 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-TiX640 9 Hz**

Fluke TiX640 Infrared Camera 9 Hz (640x480)

Includes:

- Rechargeable battery (1)
- 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



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- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
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- Share your measurement data using ShareLive™ video calls and emails.

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**Smart phone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.**

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