FLUKE ®

TiX580, TiX560, TiX520 and TiX500 Infrared Cameras

The Fluke Expert Series

Fluke Connect® compatible

Tablet-sized screen. More details. Faster decisions.

- 5.7-inch screen provides 150 % more viewing area than a standard 3.5-inch screen
- The ergonomic design and neck strap make long inspection days a lot easier
- Easily maneuver over, under and around objects with the 240 ° rotating screen while viewing the screen at a comfortable angle, unlike standard pistol grip cameras
- Eliminate potential for mis-diagnosis with automatically focused images throughout your field of view with MultiSharp™ Focus
- Get an instant in-focus image of your designated target with LaserSharp® Auto Focus
- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create a 1280 x 960 image on the TiX580 and 640 x 480 images on the TiX560 and TiX520
- MATLAB® and LabVIEW® software compatibility with the new, included Fluke Connect® desktop software allows users to integrate camera data, infrared video and infrared images to support R&D analysis
- Save time—wirelessly sync images directly from your camera to the Fluke Connect® system, and attach to an asset record or work order. Make faster decisions by accessing inspection measurements from anywhere. Team members can instantly see the same data, at the inspection site and the office.
- **Included Fluke Connect® desktop software:** Optimize thermal images, perform analytics, generate quick, customizable, robust reports and export images to the format of your choice in the cloud

PREMIUM IMAGE QUALITY

SPATIAL RESOLUTION
TiX580
0.93 mRad
TiX560, TiX520 and TiX500
1.31 mRad

RESOLUTION
TiX580
640 x 480
SuperResolution mode: 1280 x 960

TiX560, TiX520 and TiX500
320 x 240
SuperResolution mode: 640 x 480

THERMAL SENSITIVITY (NETD)*
TiX580
≤ 0.5 °C at 30 °C target temp (50 mK)
TiX560
≤ 0.03 °C at 30 °C target temp (30 mK)
TiX520
≤ 0.04 °C at 30 °C target temp (40 mK)

TEMPERATURE RANGE
TiX580
-20 °C to +800 °C (-4 °F to + 1472 °C)
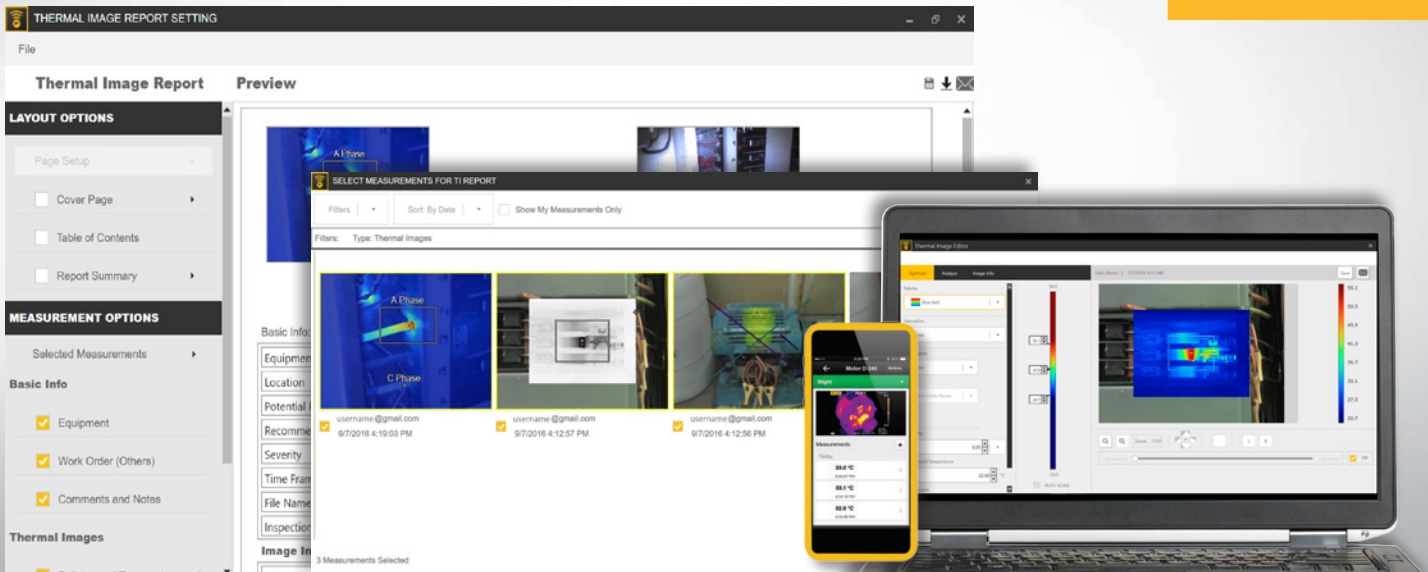**TiX560**
-20 °C to +1200 °C (-4 °F to +2192 °F)
TiX520
-20 °C to +850 °C (-4 °F to +1562 °F)
TiX500
-20 °C to +650 °C (-4 °F to +1202 °F)

*Best possible

![FLUKE CONNECT logo]

Powerful, new, easy-to-use Fluke Connect® desktop software.

Now available, a comprehensive and connected software platform that represents the future of integrated equipment maintenance, monitoring, analysis and reporting. It's easier than ever to optimize thermal images, perform analytics, generate quick, customizable, robust reports, and export images to the format of your choice in the cloud. And you will be able to integrate with Fluke Connect—the largest integrated system of maintenance software and tools in the world.

• Modern visual design
• Intuitive navigation—easier to learn, easier and faster to work in
• Simplified work flows
• Simplified reporting workflow and better report templates
• Fluke Connect Cloud storage

Fluke Connect desktop software is included with your camera purchase.

Download at **fluke.com/FlukeConnectTI**

Detailed specifications

FLUKE ®

	TiX580	TiX560	TiX520	TiX500
Key Features				
Detector resolution	640 x 480 (307,200 pixels)	320 x 240 (76,800 pixels)		
SuperResolution	Yes, on camera and in software. Captures and combines 4x the data to create a 1280 x 960 image	Yes, on camera and in software. Captures and combines 4x the data to create a 640 x 480 image		
IFOV with standard lens (spatial resolution)	0.93 mRad, D:S 1065:1	1.31 mRad, D:S 753:1		
Field of view	34 °H x 24 °V	24 °H x 17 °V		
Minimum focus distance	15 cm (approx. 6 in)			
IFOV with optional 2x telephoto smart lens	0.46 mRad. D:S is 2145.1	0.65 mRad, D:S 1529:1		
Field of view	17 °H x 12 °V	12 °H x 9 °V		
Minimum focus distance	45 cm (approx. 18 in)			
IR-Fusion blending	Picture-in-picture and full screen			
IFOV with optional 4x telephoto smart lens	0.23 mRad, D:S is 4300:1	0.33 mRad, D:S 2941:1		
Field of view	8.5 °H x 6 °V	6.0 °H x 4.5 °V		
Minimum focus distance	1.5 m (approx. 5 ft)			
IR-Fusion blending	Picture-in-picture and full screen			
IFOV with optional wide-angle smart lens	1.85 mRad, D:S is 525:1	2.62 mRad, D:S 377:1		
Field of view	68 °H x 48 °V	46 °H x 34 °V		
Minimum focus distance	15 cm (approx. 6 in)			
IR-Fusion blending	Full screen			
Optional macro smart lens	Minimum spot size: 25 microns			
Field of view	50.5 °H x 38 °V	36.1 °V x 27.1 °V		
Working distance	~8 mm (0.3 in) to ~14 mm (0.6 in) with optimal at 10 mm (0.4 in)			
MultiSharp™ Focus	Yes, focused near and far, throughout the field of view			
LaserSharp® Auto Focus	Yes, for consistently in-focus images. Every. Single. Time.			
Laser distance meter	Yes, calculates distance to the target for precisely focused images and displays distance on screen			
Advanced manual focus	Yes			
Wireless connectivity	Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN (where available)			
Fluke Connect® app compatible	Yes*, connect your camera to your smartphone, and images taken automatically upload to the Fluke Connect app for saving and sharing			
Fluke Connect Assets optional software	Yes*, assign images to assets and create work orders. Easily compare measurement types in one location			
Fluke Connect Instant Upload	Yes*, connect your camera to your building's WiFi network, and images taken automatically upload to the Fluke Connect system for viewing on your smartphone or PC			
Fluke Connect tool compatible	Yes*, connects wirelessly to select Fluke Connect enabled tools and displays measurements on camera screen			
IR-Fusion® technology	Yes, adds the context of the visible details to your infrared image			
AutoBlend™ mode	Continuously variable	100 %, 75 %, 50 %, 25 % IR plus full visible on camera		
Picture-In-Picture (PIP)	100 %, 75 %, 50 %, 25 % IR			
Continuous AutoBlend™	Set AutoBlend™ level across continuum	—		
Touchscreen display (capacitive)	5.7 inch (14.4 cm) landscape 640 x 480 LCD			
Rugged, ergonomic design	240 ° rotatable (articulating) lens			
Thermal sensitivity (NETD)**	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.03 °C at 30 °C target temp (30 mK)	≤ 0.04 °C at 30 °C target temp (40 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)
Level and span	Smooth auto and manual scaling			
Touchscreen adjustable level/span	Yes. Span and level can be easily and quickly set by simply touching the screen			
Fast auto toggle between manual and auto modes	Yes			
Fast auto-rescale in manual mode	Yes			
Minimum span (in manual mode)	2.0 °C (3.6 °F)			
Minimum span (in auto mode)	3.0 °C (5.4 °F)			
Built-in digital camera (visible light)	5MP			
Frame rate	60 Hz or 9 Hz versions			
Laser pointer	Yes			
LED light (torch)	Yes			
Digital Zoom	2x, 4x, 8x	2x, 4x		
Data storage and image capture				
Extensive memory options	Removable 4 GB micro SD memory card, 4 GB internal flash memory, save to USB flash drive capability, upload to Fluke Cloud for permanent storage.			
Post-capture image editing (on camera)	Yes, edit and analyze captured images on camera			

*Fluke Connect® analysis and reporting software is available in all countries but Fluke Connect system is not. Please check availability with your authorized Fluke distributor.
**Best possible

	TiX580	TiX560	TiX520	TiX500
Data storage and image capture (continued)				
Image file formats	Non-radiometric (.bmp, .jpeg), or fully radiometric (.is2); no analysis software required for non-radiometric (.bmp, .jpg) files			
Memory review	Thumbnail and full screen review			
Software	Fluke Connect® full analysis and reporting software with access to the Fluke Connect system*			
Export file formats with Fluke Connec® software	Bitmap (.bmp), GIF, JPEG, PNG, TIFF			
Voice annotation	60 seconds maximum recording time per image; reviewable playback on camera; Bluetooth headset provided**			
IR-PhotoNotes™	Yes (5 images)			
Advanced text annotation	Yes. Including standard shortcuts as well as user programmable options			
Video recording	Standard and radiometric			
Video file formats	Non-radiometric (MPEG - encoded .avi) and fully radiometric (.is3)			
Remote display viewing	Yes, see the live stream of the camera display on your PC, smartphone, or TV monitor. Via USB, WiFi hotspot, or WiFi network to Fluke Connect software on a PC; via WiFi hotspot to the Fluke Connect app on a smartphone*; or via HDMI to a TV monitor			
Remote control operation	Yes, through Fluke Connect desktop software or Fluke Connect mobile app*		—	
Auto capture (temperature and interval)	Yes			
MATLAB® and LabVIEW® tool boxes	Integrate camera data, infrared video and images into these software platforms to support R&D analysis		—	
Battery				
Batteries (field-replaceable, rechargeable)	Two lithium ion smart battery packs with five-segment LED display to show charge level			
Battery life	3-4 hours per battery (Actual life varies depending on settings and usage)			
Battery charge time	2.5 hours to full charge			
Battery charging system	Two-bay battery charger or in-imager charging. Optional 12 V automotive charging adapter			
AC operation	AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz)			
Power saving	User selectable sleep and power off modes			
Temperature measurement				
Temperature measurement range (not calibrated below –10 °C)	–20 °C to +800 °C (–4 °F to +1472 °F)	–20 °C to +1200 °C (–4 °F to +2192 °F)	–20 °C to +850 °C (–4 °F to +1562 °F)	–20 °C to +650 °C (–4 °F to +1202 °F)
Accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)			
On-screen emissivity correction	Yes (both value and table)			
On-screen reflected background temperature compensation	Yes			
On-screen transmission correction	Yes			
Live line marker	Yes			
Color palettes				
Standard palettes	8: Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted			
Ultra Contrast™ palettes	8: Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra			
General specifications				
Color alarms (temperature alarms)	High temperature, low temperature, and isotherms (within range)			
Infrared spectral band	7.5 µm to 14 µm (long wave)			
Temperature	Operating: –10 °C to +50 °C (14 °F to 122 °F); Storage: –20 °C to +50 °C (–4 °F to 122 °F) without batteries			
Relative humidity	10 % to 95 % non-condensing			
Center-point temperature measurement	Yes			
Spot temperature	Hot and cold spot markers, individually enabled			
User-definable spot markers	3 user-definable spot markers			
Center box	Expandable-contractible measurement box with MIN-MAX-AVG temp display			
Safety	IEC 61010-1: Overvoltage Category II, Pollution degree 2			
Electromagnetic compatibility	IEC 61326-1: Basic EM Environment; CISPR 11, Group 1, Class A			
Australian RCM	IEC 61326-1			
US FCC	CFR 47, Part 15 Subpart B			
Vibration	0.03 g2/Hz (3.8 grms), 2.5g IEC 68-2-6			
Shock/Drop	25 *g*, IEC 68-2-29/Engineered to withstand 1 meter (3.3 feet) drop with standard lens			
Size (H x W x L)/Weight (battery included)	27.3 cm x 15.9 cm x 9.7 cm (10.8 in x 6.3 in x 3.8 in)/1.54 kg (3.4 lb)			
Enclosure rating	IEC 60529: IP54 (protected against dust, limited ingress; protection against water spray from all directions)			
Warranty/Calibration cycle	Two-years (standard), extended warranties are available/Two-years (assumes normal operation and normal aging)			
Supported languages	Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish			

*Fluke Connect® analysis and reporting software is available in all countries but Fluke Connect system is not. Please check availability with your authorized Fluke distributor.

**Bluetooth not available in all countries

Ordering information

FLK-TiX580 60Hz Infrared Camera
FLK-TiX580 9Hz Infrared Camera
FLK-TiX560 60Hz Infrared Camera
FLK-TiX560 9Hz Infrared Camera
FLK-TiX520 60Hz Infrared Camera
FLK-TiX520 9Hz Infrared Camera
FLK-TiX500 60Hz Infrared Camera
FLK-TiX500 9Hz Infrared Camera

Included with product
Infrared camera with standard infrared lens; AC power supply and battery pack charger (including universal AC adapters); two rugged lithium ion smart battery packs; USB cable; HDMI video cable; rugged, hard carrying case; adjustable neck and hand strap; bluetooth headset (where available). **Available by free download:** Fluke Connect® desktop software and user manual
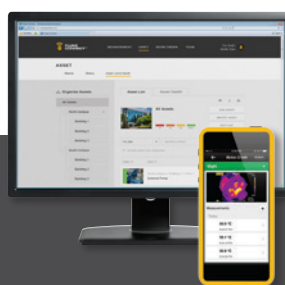
Kits
FLK-TIX560/T2 60HZ Infrared Camera, Tele2 Infrared 2x Telephoto Lens
FLK-TIX560/T2 9HZ Infrared Camera, Tele2 Infrared 2x Telephoto Lens
FLK-TIX560/W2 60HZ Infrared Camera, Wide2 Infrared Wide Angle Lens
FLK-TIX560/W2 9HZ Infrared Camera, Wide2 Infrared Wide Angle Lens

Optional accessories
FLK-LENS/TELE2 Infrared Telephoto Lens (2X magnification)
FLK-LENS/4XTELE2 Infrared Telephoto Lens (4X magnification)
FLK-LENS/WIDE2 Infrared Wide Angle Lens
FLK-LENS/25MAC2 25 Micron Macro Infrared Lens
TI-CAR-CHARGER Car Charger
BOOK-ITP Introduction to Thermography Principles Book
FLK-TIX5XX-SBP4 Additional Smart Battery
FLK-TI-SBC3B Additional Smart Battery Charger
FLK-TIX5X-LENS CAP Infrared Lens Cover
FLK-TIX5XX-NECK Neck strap
FLUKE-TIX5XX HAND Hand strap
FLK-TI-BLUETOOTH Bluetooth Headset
FLK-TIX5XX-HDMI HDMI Cable

Visit www.fluke.com to get complete details on these products or ask your local Fluke representative.
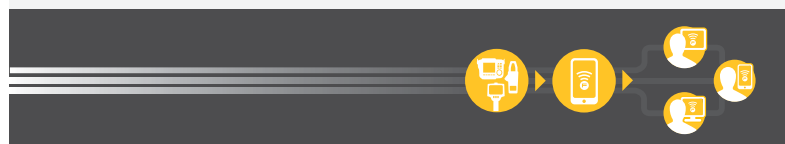

Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect® system.
- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Access baseline, historical and current measurements by asset.
- Share your measurement data using ShareLive™ video calls and emails.
- The TiX5XX Series is part of a growing system of connected test tools and equipment maintenance software. Visit the website to learn more about the Fluke Connect® system.

Find out more at **flukeconnect.com**

All trademarks are the property of their respective owners. WiFi or cellular service required to share data. Smartphone, wireless service and data plan not included with purchase. First 5 GB of storage is free. Phone support details can be viewed at **fluke.com/phones**.

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

Fluke. *Keeping your world up and running.*®

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