

TECHNICAL DATA

Ti480 PRO and Ti450 PRO Infrared Cameras

The Fluke Professional Series



Fluke Connect® compatible

The Fluke PRO series cameras introduce a leading-edge visual infrared experience. Smartest, most intuitive user interface. Increased thermal sensitivity to capture the smallest differences. Latest technology for on-screen clarity. Lens compatibility to capture targets tiny-to-large.

- Increased sensitivity to visualize temperature differences, NETD for the Ti450 PRO is $\leq 0.025^{\circ}\text{C}$ at 30°C target temp (25 mK)
- Easier to visualize and diagnose issues with sharper on-screen images, multiple rectangle markers and 9 color palettes
- More intuitive visual interface, improved, user-tested, touch screen interface
- More flexibility to visualize targets—tiny to large with interchangeable smart lenses—no calibration required, 2x and 4x telephoto, wide angle and macro lenses are compatible with Ti480 PRO and Ti450 PRO
- Capture a clear, accurate image focused throughout the field of view with MultiSharp™ Focus.
- Get an instant in-focus image of your designated target. LaserSharp® Auto Focus uses a built-in laser distance meter that calculates and displays the distance from your designated target
- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create a 1280 x 960 image (Ti480 PRO) or a 640 x 480 image (Ti450 PRO)
- Reduce the need to take notes in the field with two helpful features; IR-PhotoNotes™ and voice annotations
- Highlight areas that are outside your pre-set ‘normal’ temperature ranges quickly with color alarms
- 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.

SUPERIOR IMAGE QUALITY

Spatial Resolution

Ti480 PRO 0.93 mRad

Ti450 PRO 1.31 mRad

Resolution

Ti480 PRO 640 x 480

SuperResolution mode: 1280 x 960

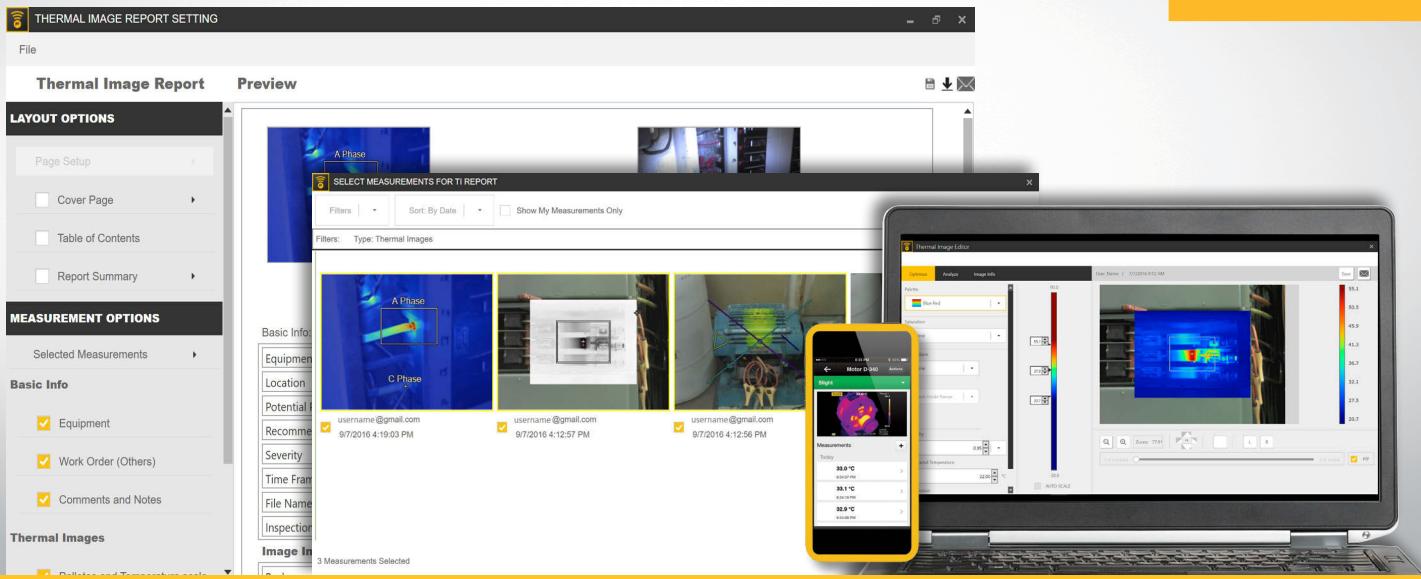
Ti450 PRO 320 x 240

SuperResolution mode: 640 x 480

Field of View

Ti480 PRO 34 °H x 24 °V

Ti450 PRO 24 °H x 17 °V



Powerful, easy-to-use Fluke Connect®

A comprehensive and connected 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

100 % Focused—Every object. Near and far. MultiSharp™ Focus.



Manual focus



MultiSharp Focus, available on the
Ti450 PRO

Detailed specifications

	Ti480 PRO	Ti450 PRO
Key features		
Detector resolution	640 x 480 (307,200) or 1280 x 960 with SuperResolution	320 x 240 (76,800 pixels) or 640 x 480 with SuperResolution
SuperResolution	Yes, in software. Captures and combines 4x the data to create a 1280 x 960 image	Yes, in software. Captures and combines 4x the data to create a 640 x 480 image
IFOV with standard lens (spatial resolution)		
Field of view	0.93 mRad, D:S 1065:1	1.31 mRad, D:S 753:1
Minimum focus distance	34 °H x 24 °V	24 °H x 17 °V
MultiSharp™ Focus	15 cm (approx. 6 in)	Yes, focused near and far, throughout the field of view
LaserSharp® Auto Focus	Yes, for consistently in-focus images. Every. Single. Time.	Yes
Laser distance meter	Yes, calculates distance to the target for precisely focused images and displays distance on screen	Yes
Advanced manual focus	Yes	Yes
Wireless connectivity		
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	Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN (where available)
Fluke Connect® Assets optional software	Yes*, assign images to assets and create work orders. Easily compare measurement types in one location.	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® 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	Yes*
Fluke Connect® tool compatible	Yes*, connects wirelessly to select Fluke Connect enabled tools and displays measurements on camera screen.	Yes*
IR-Fusion® technology		
AutoBlend™ mode	Min, Mid, Max IR plus full visible on camera; continuously variable in software	Yes, adds the context of the visible details to your infrared image
Picture-In-Picture (PIP)	Yes	Min, Mid, Max IR plus full visible on camera; continuously variable in software
Ruggedized touchscreen display	3.5 inch (landscape) 640 x 480 LCD	Yes
Rugged, ergonomic design for one-handed use	Yes	Yes
Thermal sensitivity (NETD)**	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.025 °C at 30 °C target temp (25 mK)
Level and span		
Fast auto toggle between manual and auto modes	Yes	Smooth auto and manual scaling
Fast auto-rescale in manual mode	Yes	Smooth auto and manual scaling
Minimum span (in manual mode)	2.0 °C (3.6 °F)	Smooth auto and manual scaling
Minimum span (in auto mode)	3.0 °C (5.4 °F)	Smooth auto and manual scaling
Built-in digital camera (visible light)	SMP	Smooth auto and manual scaling
Frame rate	60 Hz or 9 Hz versions	Smooth auto and manual scaling
Laser pointer	Yes	Smooth auto and manual scaling
LED light (torch)	Yes, improved output torch	Smooth auto and manual scaling
Digital zoom	2x and 4x	Smooth auto and manual scaling
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 for permanent storage	Smooth auto and manual scaling
Image capture, review, save mechanism	One-handed image capture, review, and save capability	Smooth auto and manual scaling
Image file formats	Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2); no analysis software required for non-radiometric (.bmp, .jpg and .avi) files	Smooth auto and manual scaling
Memory review	Thumbnail and full screen review	Smooth auto and manual scaling
Software	SmartView® software—full analysis and reporting software	Smooth auto and manual scaling
Export file formats with Fluke Connect® desktop software	Bitmap (.bmp), GIF, JPEG, PNG, TIFF	Smooth auto and manual scaling
Voice annotation	60 seconds maximum recording time per image; reviewable playback on camera, optional bluetooth headset available but not required	Smooth auto and manual scaling
IR-PhotoNotes™	Yes (5 images)	Smooth auto and manual scaling
Text annotation	Yes	Smooth auto and manual scaling
Video recording	Standard and radiometric	Smooth auto and manual scaling
File formats video	Non-radiometric (MPEG - encoded .AVI) and fully-radiometric (.IS3)	Smooth auto and manual scaling
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 SmartView® software on a PC; via WiFi hotspot to the Fluke Connect® app on a smartphone; or via HDMI to a TV monitor	Smooth auto and manual scaling
Remote control operation	Yes, through SmartView® software or Fluke Connect® mobile app	Smooth auto and manual scaling
Auto capture (temperature and interval)	Yes	Smooth auto and manual scaling
Battery		
Batteries (field-replaceable, rechargeable)	Two lithium ion smart battery packs with five-segment LED display to show charge level	Smooth auto and manual scaling
Battery life	2-3 hours per battery (*Actual life varies depending on settings and usage)	3-4 hours per battery (*Actual life varies depending on settings and usage)
Battery charge time	2.5 hours to full charge	Smooth auto and manual scaling
Battery charging system	Two-bay battery charger or in-imager charging. Optional 12 V automotive charging adapter	Smooth auto and manual scaling
AC operation	AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz)	Smooth auto and manual scaling
Power saving	User selectable sleep and power off modes	Smooth auto and manual scaling

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

Detailed specifications

	Ti480 PRO	Ti450 PRO
Temperature measurement		
Temperature measurement range (not calibrated below -10 °C)	≤ -10 °C to +1000 °C (-14 °F to 1832 °F)	-10 °C to 1500 °C (14 °F to 2732 °F)
Accuracy	± 2 °C or 2% (at 25 °C nominal, whichever is greater)	Yes (both value and table)
On-screen emissivity correction		Yes
On-screen reflected background temperature compensation		Yes
On-screen transmission correction		Yes
Live line marker		Yes
Color palettes		
Standard palettes	9: Rainbow, Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted	
Ultra Contrast™ palettes	9: Rainbow, Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted	
Lens compatibility		
Macro-25 micron lens: 25 MAC2	Yes	
2 x telephoto lens: TELE 2	Yes	
4 x telephoto lens: TELE4	Yes	
Wide angle lens: WIDE 2	Yes	
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)	
Operating temperature	-10 °C to +50 °C (14 °F to 122 °F)	
Storage temperature	-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	
User-definable spot markers	3 user-definable spot markers	
Center box	Up to 3 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 C Sections 15.207, 15.209, 15.249	
Vibration	0.03 g2/Hz (3.8 g), 2.5 g IEC 68-2-6	
Shock	25 g, IEC 68-2-29	
Drop	Engineered to withstand 2 meter (6.5 feet) drop with standard lens	
Size (H x W x L)	27.7 cm x 12.2 cm x 16.7 cm (10.9 in x 4.8 in x 6.5 in)	
Weight (battery included)	1.04 kg (2.3 lb)	
Enclosure rating	IEC 60529: IP54 (protected against dust, limited ingress; protection against water spray from all directions)	
Warranty	Two-years (standard), extended warranties are available	
Recommended calibration cycle	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	
RoHS compliant	Yes	





Ordering information

FLK-Ti480 PRO 60 Hz Infrared Camera

FLK-Ti480 PRO 9 Hz Infrared Camera

FLK-Ti450 PRO 60 Hz Infrared Camera

FLK-Ti450 PRO 9 Hz Infrared Camera

Included

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; 4 GB micro SD card; rugged, hard carrying case; soft transport bag and adjustable hand strap. **Available by free download:** Fluke Connect® desktop software* and user manual.

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/MACRO2 Infrared Macro Lens

(close-up 0.5 times)

TI-CAR-CHARGER Car Charger

FLK-TI-VISOR3 Sun Visor

BOOK-ITP Introduction to Thermography Principles Book

TI-TRIPOD3 Tripod Mounting Accessory

FLK-TI-BLUETOOTH Bluetooth headset

FLK-TI-SBP3 Additional Smart Battery

FLK-TI-SBC3B Additional Smart Battery Charger

*Only available in certain countries.

The Expert Series

Go expert with the Fluke TIX580, TIX560, TIX520 or TIX500, and get up to 640 x 480 resolution along with maximum flexibility of a screen that rotates a full 240 degrees and a 5.7 inch touchscreen LCD. Includes in-field analysis and post-capture image processing on camera, along with other expert-level features and more lens options.



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 Ti450 PRO and Ti480 PRO infrared cameras are part of a growing system of connected test tools and equipment maintenance software. Visit the website to learn more about the Fluke Connect® system.



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.

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.®

Mouser Electronics

Authorized Distributor

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Fluke:

[FLK-TI450PRO60HZ](#) [FLK-TI480PRO60HZ](#)

ООО "ЛайфЭлектроникс"

"LifeElectronics" LLC

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибуторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибуторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помочь разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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