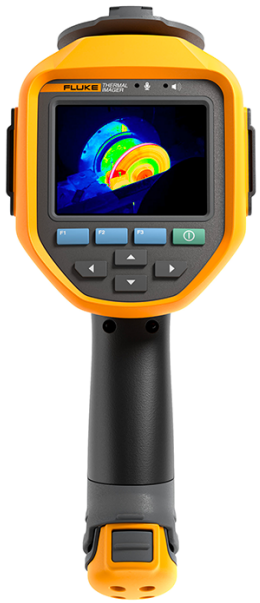
TECHNICAL DATA

Fluke Ti480U Ti401U Ti300U Infrared Thermal Cameras



Key features

- It is equipped with a robust sensor and optical system that delivers enhanced image sharpness to capture a clear image for better quality image presentation
- UltraFocus focusing technology: effective focus algorithm in one second, laser distance autofocus, and continuous auto focus function makes inspection work easier and more efficient
- Up to 30Hz frame rate to support smooth video recording for moving objects
- Temperature measurement range up to 1200 °C to cover higher process requirements and R&D applications
- Support up to 10x digital zoom for easy screen zooming and checking of long-distance targets such as high voltage equipment, overhead pipelines, and large mechanical equipment
- SmartView IR software for PC to process thermal images and videos, analyze measurement data, and generate reports
- Classic Fluke industrial design: Ergonomic and rugged design for single-hand operation in industrial environment

Product overview: Fluke Ti480U Ti401U Ti300U Infrared Thermal Cameras

The NEW Fluke Ultra Series Thermal Cameras is designed to provide advanced visual infrared experience. It comes with a smart intuitive user interface, increased thermal sensitivity to capture the smallest differences and the latest technology for on-screen clarity. A professional 640 x 480 Infrared Camera with improved spatial resolution and UltraFocus focusing technology makes the Ti480U/401U/300U go-to camera range for the professional moving to the next level.

Specifications: Fluke Ti480U Ti401U Ti300U Infrared Thermal Cameras

Function Parameter	Fluke Ti480u	Fluke Ti401u	Fluke Ti300u
Basic Parameters			
IR resolution	640 × 480	640 × 480	384 × 288
SuperResolution	1280 × 960	-	-
Detector type	Uncooled focal plane infrared detector		
Thermal sensitivity (NETD) @ 30 °C	50 mk (0.05 °C)	75 mk (0.075 °C)	75 mk (0.075 °C)
Spectral response	7 to 14 µm		
Image frame rate	30 Hz	30 Hz	30 Hz
Lens Field of View (FOV)	25° x 19°		
Spatial resolution (IFOV)	0.68 mrad	0.68 mrad	1.14 mrad
Minimum imaging distance	0.25 m		0.1 m
Lens focal distance	f 24.8		f 15
Focus	Auto / Manual Focus		
Lens recognition	Auto		
Optional lens	2x telephoto lens		
	4x telephoto lens		
	Wide-angle lens		
Digital Zoom	1-10x	1-10x	1-4x
Measurement Analysis			
Temperature range	-20 °C to 1200 °C	-20 °C to 650 °C	
Temperature measurement range	-20 °C to 120 °C	-20 °C to 120 °C	
	0 °C to 650 °C	0 °C to 650 °C	
	300 °C to 1200 °C		
Intelligent range	Yes	Yes	Yes
Temperature accuracy	±2 °C or 2%, whichever is greater (@ 23 °C ± 5 °C ambient temperature)		
Temperature measurement area	Spots: 16		
	Lines: 8		
	Areas: 12		
Global temperature measurement correction	Support emissivity, environment temperature, reflected temperature, relative humidity, temperature measurement distance, IR window (temperature and transmittance) correction		
Area temperature measurement correction	Yes		

Area audible alarm	Support high and low temperature alarm for the highest, lowest and average temperature of the area		
Temperature rise function	Reference temperature can be the highest, lowest, or custom temperature of the area		
On-Imager analysis	The thermal photos or videos are directly analyzed in the Imager		
Analysis software for PC	SmartView IR		
Image Display			
Display Screen	3.5" LCD, 640 × 480		
Image mode	Thermal image, Visible image, PIP, Fusion		
Palettes	Grey, Iron 10, IronRed, Rainbow, Grey10, GreyRed, MidGrey, Yellow and Rain		
	Palettes can be inverted		
	Support real-time palette preview and switching		
Temperature span mode	Support automatic adjustment of temperature span (min. 3 °C)		
	Support manual adjustment of temperature span (min. 2 °C)		
	The maximum and minimum value of temperature span can be selected by touch (min. 2 °C)		
Color and audible alarm	Yes. Above the temperature, below the temperature and between the temperature		
Information displayed on the image	Display the global maximum, minimum, average temperature and temperature measurement parameters		
High/low temperature tracking	Marking and automatically tracks high and low temperature points		
IR-Fusion			
Blending degree of a visual photo and an infrared thermal image	0% to 100%		
Picture-in-Picture (PIP)	Yes. The size, position and blending degree of infrared window can be adjusted		
Shooting Function			
Digital camera	Industrial grade digital camera with 13-megapixel lens		
Memory card	Micro SD card, standard 32 GB; expandable to 64 GB, 128 GB		
Shooting Mode	Support single frame and time-lapse shooting		
Image format	.bmp .jpg		
Screen freeze	Support single frame shooting and fully-radiometric video recording	Support single frame shooting	Support single frame shooting and fully-radiometric video recording
Code scanning function	Yes. A QR code can be scanned as a label		
Annotation function	Support voice, text and label annotation		
Fully-radiometric video recording	Support thermal video recording for analysis		Support thermal video recording for analysis
Non-fully-radiometric video recording	Support thermal video, visible video recording (only for viewing, not for analysis)		Support thermal video, visible video recording (only for viewing, not for analysis)
Video frame rate	1 Hz to 9/16 Hz		1 Hz to 9/16 Hz

Video Format	.is5, .mp4		.is5, .mp4
Gallery	Support viewing, editing and deleting captured images and video files		
Data Connection			
Bluetooth connection	Support BT4.2 LE		
USB interface	Type-A, USB 2.0		
HDMI interface	Mini HDMI interface, HDMI 1.4		
Fully-radiometric video analysis via PC software	Yes	-	Yes
Remote display via software	Yes	-	Yes
Remote operation via software	Yes	-	Yes
HDMI output	Support connection to a display or a projector via the HDMI interface		
Ancillary Function			
Laser	Yes		
Temperature feature measurement	Support measuring the length of the temperature measurement line; support measuring the rectangular and circular area of the temperature measurement area		
LED torch/flashlight	Support flashlight and flash mode		
Power System			
Battery type	7.2V, 19Whr lithium battery, replaceable and rechargeable on field		
Battery life	2 to 3 hours/battery (*Actual life depends on settings and usage)		
Charge Mode	10-15 V DC charging		
Charging time	2.5 hours to full charge		
Energy saving management	Auto screen-off		
Battery charge	Ti SBC3B Two Bay Battery Charger (100 V ac to 240 V ac, 50/60 Hz, included), or in-Imager charging. Optional 12 V automotive charging adapter.		
External power supply	Power adapter (110 to 220 V, 50/60 Hz AC power)		
Reliability and Certification			
Safety standard	IEC 61010-1: pollution degree 2		
Electromagnetic Compatibility (EMC)	International: IEC 61326-1: Industrial Electromagnetic Environment; CISPR 11: Group 1, Class A Korea (KCC): Class A Equipment (Industrial Broadcasting & Communication Equipment)		
Radio frequency	2400 MHz to 2483.5 MHz		
Radio output power	<100 mW		
Laser	IEC 60825-1, Class 2; 650 nm; <1 mW		
Ingress protection rating	IEC 60529: IP52		
Drop test	Designed for 1 m drop resistance		
Physical Parameter			
Operating temperature	-10 °C to 50 °C		

Storage temperature	-20 °C to 50 °C, without battery	
Relative humidity	0% to 95% (non-condensing)	
Dimensions	27.9 cm x 12.2 cm x 17.5 cm	
Weight	1215 g	1188 g
Warranty and Maintenance		
Warranty	2 years	
Recommended calibration period	2 years	
Supported Languages		
Supported languages	Simplified Chinese, English, Japanese, Korean, Traditional Chinese	
Optional Lenses		
Lens name	Field of view	Minimum imaging distance
Standard lens	25° x 19°	0.1 m (Ti300U)0.25 m (Ti480/401U)
Wide-angle lens	44° x 34°	0.1 m
2x telephoto lens	12° x 9°	1.0 m (Ti480U/401U), 0.25 m (Ti300U)
4x telephoto lens	7° x 5°	3.0 m (Ti480U/401U), 1 m (Ti300U)

Ordering information

Fluke Ti480U

Model: Fluke Ti480U Thermal Imagers

Fluke Ti480U
Thermal Imagers

- Fluke Ti480U Thermal Imager
- Charger
- Battery
- Hard carrying case
- HDMI cable
- USB cable
- Safety information
- Report

Fluke Ti401U

Model: Fluke Ti401U Thermal Imagers

Fluke Ti401U
Thermal Imagers

- Fluke Ti401U Thermal Imager
- Charger
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- USB cable
- Safety information

- Report

Fluke Ti300U

Model: Fluke Ti300U Thermal Imagers

Fluke Ti300U
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