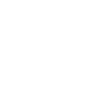
# HANDHELD

#### Where used

Technicians and contractors who need quality images and feature rich affordability for quick scans and/or intermittent inspections.

- Electrical inspections
- HVAC/R inspections
- Mechanical

- Residential home inspections • Light commercial maintenance



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	TiS75+	TiS60+	TiS55+	TiS20+/TiS20+ MAX	PTi120	
Infrared resolution	384 x 288 (110,592 pixels)	320 x 240 (76,800 pixels)	256 x 192 (49,152 pixels)	120 x 90 (10,800 pixels)		
IFOV (spatial resolution)	1.91 mRad	1.86 mRad	1.91 mRad	7.6 mRad		
Field of view	42 °H x 30 °V	34.1 °H x 25.6 °V	28 °H x 20 °V	50 °H x 38 °V		
Distance to spot		130:1				
Thermal sensitivity*	Target temp at or over 0 °C (40 mk)	$\leq$ 0.045 °C at 30 °C target temp (45 mK)	Target temp at or over 0 °C (40 mk)	er 0 °C (40 mk) Target temp at or over 0 °C (60 mK)		
Temperature range	-20 °C to 550 °C (-4 °F to 1022 °F) (not calibrated below -10 °C)	–20 °C to 400 °C (-4 °F to 752 °F)	–20 °C to 550 °C (–4 °F to 1022 °F) (not calibrated below –10 °C)	TiS20+ -20 ° C to 150 ° C (-4 °F to +302 °F) TiS20+ MAX -20 ° C to 400 ° C (-4 °F to +752 °F)	-20 ° C to 150 ° C (-4 °F to +302 °F)	
Focus system	Manual focus plus focus free operation for distances >0.5m via focus marker	Fixed Focus	Manual focus, plus focus free operation for distances >0.5m via focus marker	Fixed Focus		
level and span		Smooth auto and manual scaling –				
Optional lenses	Not compatible with optional lenses					
Wireless connectivity**	Fluke Connect™ app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN					
IR-Fusion*	AutoBlend continuous 0 % to 100 %	Yes, 4 levels 0%, 25%, 50%, 75%, 100%	AutoBlend continuous 0 % to 100 %	Continuous Touchscreen IR-Fusion 0-100%		
Display	3.5" (8.9 cm landscape) touchscreen 640 x 480 LCD	3.5 inch (8.9 cm landscape) 320 x 240 LCD	3.5" (8.9 cm landscape) touchscreen 640 x 480 LCD	3.5 inch (8.9 cm landscape) 320 x 240 touchscreen LCD		
Design			Pistol-grip design for one-handed use		Pocket sized, one-handed use	
Frame rate	9 Hz or 27 Hz models	< 9 Hz or 30 Hz	9 Hz or 27 Hz models	9Hz		
Software		Full analysis and reporting software with access to Fluke Connect Desktop				
Voice annotation	Yes, 60 second maximum audio recording via Bluetooth Audio Headset Profile (HSP) connection to external device. (sold separately)	60 seconds maximum recording time per image; review- able playback on camera; Bluetooth headset required (sold separately)	Yes, 60 second maximum audio recording via Bluetooth Audio Headset Profile (HSP) connection to external device. (sold separately)	_		
Text annotation	After IS2 capture, user can type in a note using on-screen keyboard.	-	After IS2 capture, user can type in a note using on-screen keyboard.	Yes. Including standard shortcuts as well as user programmable options		
Video recording	Standard and radiometric video. up to 5 minute recording length. avi and is3		-	-		
Battery life	≥ 3.5 hours continuous without WiFi (Actual life depends on settings and usage)	4 hours continuous use per battery pack (without WiFi)	≥ 3.5 hours continuous without WiFi (Actual life depends on settings and usage)	$\geq$ 5 hours continuous (without WiFi)	$\geq$ 2 hours continuous (without WiFi)	
Remote control operation	Yes		-	-		
Alarms	High temperature, low temperature, and dew point calcu- lation	High temperature, low temperature, isotherms (within range)	High temperature, low temperature	-	-	
Warranty			2 year warranty			
Asset tagging	Automatically organize and file thermal images by scanning QR codes	-	Auto	omatically organize and file thermal images by scanning QR co	des	



• Building diagnostics - Building envelope - Commercial/industrial facilities





### HANDHELD

Professional in-house, service, and contract thermographers as well as maintenance personnel who need quality images and advanced features and specifications for use in multiple applications.

### Where used

Veterinary

• Industrial maintenance

• Reliability inspections (PdM)

- Heavy building diagnostics
  Building envelope
- Heavy commercial facility maintenanceOil and gas maintenance
  - Construction defects
    - Electrical, water, gas utilities
    - Chemical processing
    - Machinery, instrumentation and appliances







	Ti480 PRO	Ti480 PRO Ti401 PRO		
Infrared resolution	640 x 480 (307,200 pixels)	640 x 480 (307,200 pixels)	320 x 240 (76,800 pixels)	
Super resolution	Yes, in software. Captures and combines 4x the data to create a 1280 x 960 image			
IFOV (spatial resolution)	0.93 1	nRad	1.85 mRad	
Field of view		34° H x 24° V		
Distance to spot	106	5:1	532:1	
Thermal sensitivity*	$\leq$ 0.05 °C at 30 °C target temp (50 mK)	05 °C at 30 °C target temp (50 mK) ≤ 0.075 °C at 30 °C target temp (75 mK)		
Temperature range	-20 °C to +1,000 °C (-4 °F to +1,832 °F)	-20 °C to +650 °C (-4 °F to +1,202 °F)		
MultiSharp™ Focus	Yes	No		
LaserSharp™ Auto Focus	LaserSharp™ Auto Focus for consistently in-focus images			
Manual focus	Yes			
Laser distance meter	Yes, calculates distance to the target for precisely focused images and displays distance on screen			
Optional lenses	Pre-calibrated smart optional lenses: wide angle, 2x and 4x telephoto, macro–25 micron			
Wireless connectivity**	Fluke Connect™ app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN			
IR-Fusion <sup>®</sup>	Five modes of image blending (AutoBlend™ mode, Picture-in- Picture (PIP), IR/Visible alarm, Full IR, Full visible light) add the context of the visible details to your infrared image			
Display	3.5 inch touchscreen LCD, 640 x 480 pixel resolution			
Design	Pistol-grip design for one-handed use			
Frame rate	60 Hz or 9 Hz versions			
Software	Full analysis and reporting software with access to Fluke Connect Desktop			
Voice annotation	60 seconds maximum recording time per image, reviewable playback on camera; Bluetooth headset optional, but not required			
Text annotation	Yes. Including standard shortcuts as well as user programmable options			
Video recording	Standard and radiometric —		-	
Streaming video (remote display)	network to Fluke	the camera display on your PC, smartphone, or TV monitor. Via USB, WiFi hotspot, or WiFi vrk to Fluke Connect Desktop software on a PC; via WiFi hotspot to the luke Connect™ app on a smartphone; or via HDMI to a TV monitor		
Remote control operation	Yes, through Fluke Connect™ mobile app	-		
Alarms	High temperature, low temperature, and isotherms (within range)			
Warranty	Two-years (standard), extended warranties are available			

	Wide Angle Infrared Smart Lens		
IFOV (spatial resolution)	640 x 480 camera 1.86 mRad 320 x 240 camera 3.71 mRad		
Field of view	46 ° H x 34 ° V		

**Minimum focus distance** 

15 cm (approximately 6 in)



## **ADD ON LENSES**



## ARTICULATING

Engineers, R&D professionals and advanced thermographers who require premium image quality and an unsurpassed level of detail in every infrared image.

#### Where used

- Industrial maintenance
- Oil and gas predictive maintenance
- Power generation/transmission
- Research and development
- Electrical Mechanical
- Sciences





• Plus the industries included under the

Quality control

handheld series



Lens

	TiX580	<b>TiX501</b>	
Detector resolution	640 x 480 (307,200 pixels) SuperResolution mode: 1280 x 960 (1,228,800 pixels) 640 x 480 (307,200 pixels)		
IFOV (spatial resolution)	0.93 mRad		
Field of view	34 °H x 24 °V		
Distance to spot	1065:1		
Thermal sensitivity*	$\leq$ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.075 °C at 30 °C target temp (75 mK)	
Temperature range	-20 °C to +1,000 °C (-4 °F to +1,832 °F) -20 °C to +650 °C (-4 °F to +1,		
Focus systems	MultiSharp <sup>™</sup> Focus, LaserSharp <sup>™</sup> Auto Focus with built-in laser distance meter and advanced manual focus LaserSharp <sup>™</sup> Auto Focus with built-in lase tance meter and advanced manual focus		
Laser distance meter	Yes, calculates distance to the target for precisely focused images and displays distance on screen		
Optional lenses	Pre-calibrated smart optional lenses: wide angle, 2x and 4x telephoto, macro–25 micron lens		
Wireless connectivity**	Fluke Connect <sup>™</sup> app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android <sup>™</sup> 4.3 and up, and WiFi to LAN		
IR-Fusion <sup>®</sup>	Five modes of image blending (AutoBlend™ mode, Picture-in- Picture (PIP), IR/Visible alarm, Full IR, Full visible light) add the context of the visible details to your infrared image		
Display	5.7 inch touchscreen LCD, 640 x 480 pixel resolution		
Design	240° rotating (articulating) lens		
Frame rate	60 Hz or 9 Hz versions		
Software	Full analysis and reporting software with access to Fluke Connect Desktop		
Voice annotation	60 seconds maximum recording time per image, reviewable playback on camera; Bluetooth headset optional, but not required		
Text annotation	Yes. Including standard shortcuts as well as user programmable options		
Video recording	Standard and radiometric Standard		
Streaming video (remote display)	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 Desktop 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	Remote display and control operation through Fluke Connect Remote display through Fluke Connect		
Alarms	High temperature, low temperature, and isotherms (within range)		
Warranty	Two-years (standard), extended warranties are available		

IFOV (spatial resolution)	640 x 480 camera 1.86 mRad 320 x 240 camera 3.71 mRad	
Field of view	46 ° H x 34 ° V	
Minimum focus distance	15 cm (approximately 6 in)	8



# **ADD ON LENSES**



R&D professionals, scientists and engineers who require a mounted infrared camera to continuously stream, measure and analyze data

#### Where used

- Research and development
- Electrical
- Mechanical
- Biology/sciences
- Quality control
- Pre- and post- production testing





Wide Angle Infrared Lens

	Wide Angle Infrared Smart Lens	25 Micron Macro Infra- red Smart Lens	4x Telephoto lens	2x telephoto lens
IFOV (spatial resolution)	640 x 480 camera: 0.93 mRad 320 x 240 camera 1.85 mRad	N/A	640 x 480 camera: 0.24 mRad 320 x 240 camera: 0.48 mRad	640 x 480 camera: 0.47 mRad 320 x 240 camera: 0.94 mRad
Field of view	45° H x 32° V	36.1° H x 27.1°	8.5° H x 6.0° V	17 ° H x 12 ° V
Minimum focus distance	15 cm (approximately 6 in)	8 mm (0.3 in) to ~14 mm (0.6 in) with optimal at 10 mm (0.4 in)	1.5 m (approximately 5 ft)	45 cm (approximately 18 in)





