FLUKE®

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

Where used

- Electrical inspections
- HVAC/R inspections
- Mechanical
- Residential home inspections
- Light commercial maintenance
- Building diagnostics
  – Building envelope
  – Commercial/industrial facilities

	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	
Thermal sensitivity*	≤ 0.040 °C at 30 °C target temp (40 mk)	≤ 0.045 °C at 30 °C target temp (45 mK)	≤ 0.040 °C at 30 °C target temp (40 mk)	≤ 0.060 °C at 30 °C target temp (60 mK)	
Temperature range	–20 °C to 550 °C (–4 °F to 1022 °F)	–20 °C to 400 °C (–4 °F to 752 °F)	–20 °C to 550 °C (–4 °F to 1022 °F)	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 and fixed focus	Fixed Focus	Manual focus and fixed focus	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 %	AutoBlend continuous 0 % to 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	
Frame rate	9 Hz or 27 Hz models	< 9 Hz or 30 Hz models	9 Hz or 27 Hz models	9 Hz	
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)			–	
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.	After IS2 capture, user can type in a note using on-screen keyboard.	
Video recording	Standard and radiometric video, mp4 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)	≥ 5 hours continuous (without WiFi)	≥ 2 hours continuous (without WiFi)
Data streaming	Yes			–	
Color alarms	High temperature, low temperature, inside or outside a set range, and dew point calculation	High temperature, low temperature, isotherms (within range)	High temperature, low temperature and inside or outside a set range.	–	
Warranty	2 year warranty				
Asset tagging	Automatically organize and file thermal images by scanning QR codes	–	Automatically organize and file thermal images by scanning QR codes		

*Best possible

**Fluke Connect™ not available in all countries.

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

- Industrial maintenance
- Heavy commercial facility maintenance
- Oil and gas maintenance
- Veterinary
- Reliability inspections (PdM)

- Heavy building diagnostics
  – Building envelope
  – Construction defects
- Electrical, water, gas utilities
- Chemical processing
- Machinery, instrumentation and appliances

	Ti480 PRO	Ti401 PRO	Ti300+
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	No	
IFOV (spatial resolution)	0.93 mRad		1.85 mRad
Field of view	34° H x 24° V		
Thermal sensitivity*	≤ 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 +1,202 °F)	
MultiSharp™ Focus	Yes, automatically captures in focus objects at different distances using multiple images	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		
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®	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, 640 x 480 LCD		
Frame rate	60 Hz or 9 Hz models		
Software	Full analysis and reporting software with access to Fluke Connect Desktop and SmartView software		
Voice annotation	Yes, 60 second maximum audio recording via Bluetooth Audio Headset Profile (HSP) connection to external device (sold separately but not required).		
Text annotation	Yes. Including standard shortcuts as well as user programmable options		
Video recording	Standard and radiometric. mp4 is3	—	
Streaming video (remote display)	Yes, see the live stream of the camera display on your PC, 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	Yes, through Fluke Connect™ mobile app	—	
Color alarms	High temperature, low temperature, and isotherms (within range)		
Warranty	Two-years (standard), extended warranties are available		

	Wide Angle Infrared Smart Lens	4x Telephoto lens	2x telephoto lens
IFOV (spatial resolution)	Ti401 PRO / Ti480 PRO: 1.86 mRad Ti300+: 3.71 mRad	Ti401 PRO / Ti480 PRO: 0.17 mRad Ti300+: 0.34 mRad	Ti401 PRO / Ti480 PRO: 0.33 mRad Ti300+: 0.66 mRad
Field of view	46 ° H x 34 ° V	6.0° H x 4.5° V	12 ° H x 9 ° V
Focus distance	15 cm (approximately 6 in)	1.5 m (approximately 5 ft)	45 cm (approximately 18 in)

	25 Micron Macro Infrared Smart Lens
Object size	7.8 mm x 5.8 mm
Focus distance	10.4 mm +/- 1 mm (0.4 in)

*Best possible

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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
- Quality control
- Plus the industries included under the handheld series

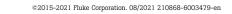|	TiX580	TiX501
Detector resolution	640 x 480 (307,200 pixels) SuperResolution mode: 1280 x 960 (1,228,800 pixels)	640 x 480 (307,200 pixels)
IFOV (spatial resolution)	0.93 mRad	
Field of view	34 °H x 24 °V	
Thermal sensitivity*	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.075 °C at 30 °C target temp (75 mK)
Temperature range	–20 °C to +1,000 °C (–4 °F to +1,832 °F)	–20 °C to +650 °C (–4 °F to +1,202 °F)
Focus systems	LaserSharp™ Auto Focus with built-in laser distance meter and advanced manual focus	LaserSharp™ Auto Focus with built-in laser distance meter and advanced manual focus
MultiSharp™ Focus	Yes, automatically captures in focus objects at different distances using multiple images	No
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	
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®	Five modes of image blending (AutoBlend continuous 0 % to 100 %, Picture-in-Picture (PIP), IR/Visible alarm, Full IR, Full visible light) add the context of the visible details to your infrared image	Five modes of image blending (AutoBlend discrete levels 0% 25% 50% 75% 100%, 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 and SmartView software	
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	

	Wide Angle Infrared Smart Lens	4x Telephoto lens	2x telephoto lens
IFOV (spatial resolution)	TiX501 / TiX580: 1.86 mRad	TiX501 / TiX580: 0.17 mRad	TiX501 / TiX580: 0.33 mRad
Field of view	46 ° H x 34 ° V	6.0° H x 4.5° V	12 ° H x 9 ° V
Focus distance	15 cm (approximately 6 in)	1.5 m (approximately 5 ft)	45 cm (approximately 18 in)

	25 Micron Macro Infrared Smart Lens
Object size	7.8 mm x 5.8 mm
Focus distance	10.4 mm +/- 1 mm (0.4 in)

*Best possible

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FLUKE

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

	RSE600	RSE300
Infrared resolution	640 x 480 (307,200 pixels)	320 x 240 (76,800 pixels)
IFOV (spatial resolution)	0.93 mRad	1.85 mRad
Field of view	34° H x 24° V	
Thermal sensitivity*	≤ 0.040 °C at 30 °C target temp (40 mK)*	≤ 0.030 °C at 30 °C target temp (30 mK)*
Temperature range	–10 °C to +1200 °C (14 °F to +2192 °F)	
Focus systems	Focus is adjusted in Fluke SmartView R&D software	
Optional lenses	Pre-calibrated smart lenses: wide angle, 2x telephoto, 4x telephoto, macro	
IR-Fusion®	Five modes of image blending (AutoBlend discrete levels 0% 25% 50% 75% 100%, Picture-in- Picture (PIP), IR/Visible alarm, Full IR, Full visible light) add the context of the visible details to your infrared image	
Display	No on-camera display	
Design	Can be mounted to a stand or wall bracket for continuous data streaming	
Frame rate	60 Hz or 9 Hz versions	
Software	Full analysis and reporting software with Fluke SmartView R&D. Compatible with MATLAB™ and LabVIEW™ software	
Voice annotation	Yes, in Fluke SmartView R&D software	
Text annotation	Yes, in Fluke SmartView R&D software	
Video recording	Radiometric, in Fluke SmartView R&D software, with exports to standard non-radiometric formats	
Streaming video (remote display)	Yes, see the live stream of the camera display on your PC or TV monitor. Via USB, WiFi hotspot, or WiFi network to Fluke software on a PC; or via HDMI to a TV monitor	
Remote control operation	Yes, through ethernet and Fluke SmartView R&D software	
Alarms	Yes, in Fluke SmartView R&D software–high temperature, low temperature, and isotherms (within range)	
Warranty	Two years (standard), extended warranties are available	

	Wide Angle Infrared Smart Lens	4x Telephoto lens	2x telephoto lens
IFOV (spatial resolution)	RSE600: 0.93 mRad RSE300: 1.85 mRad	RSE600: 0.24 mRad RSE300: 0.48 mRad	RSE600: 0.47 mRad RSE300: 0.94 mRad
Field of view	46 ° H x 34 ° V	6.0° H x 4.5° V	12 ° H x 9 ° V
Focus distance	15 cm (approximately 6 in)	1.5 m (approximately 5 ft)	45 cm (approximately 18 in)

	25 Micron Macro Infrared Smart Lens
Object size	11 mm x 8.25 mm
Focus distance	10.8 mm +/- 1 mm (0.4 in)

*Best possible