

Choose the right tool for the job.

EXPERT SERIES

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

PROFESSIONAL SERIES

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

PERFORMANCE SERIES

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

Where used

- Industrial maintenance
- Oil and gas predictive maintenance
- Power generation/transmission
- Research and development
 - Electrical
 - Mechanical
 - Biology/sciences
- Quality control
- Plus the industries included under the professional and performance series

- 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
- Plus the industries included under the performance series

- Electrical inspections
- HVAC/R inspections
- Mechanical
- Residential home inspections

- Light commercial maintenance
- Building diagnostics
 - Building envelope
 - Commercial/industrial facilities



	TiX1000	TiX660	TiX640	TiX560	TiX520	TiX500	Ti450	Ti400	Ti300	TiS75	TiS65	TiS60	TiS55	TiS50	TiS45	TiS40	TiS20	TiS10
Detector resolution	1024 x 768, 2048 x 1536 Super Res.	640 x 480, 1280 x 960 Super Res.	640 x 480	320 x 240, 640 x 480 Super Res.	320 x 240, 640 x 480 Super Res.	320 x 240, 640 x 480 Super Res.	320 x 240, 640 x 480 Super Res.	320 x 240	240 x 180	320 x 240	260 x 195	260 x 195	220 x 165	220 x 165	160 x 120	160 x 120	120 x 90	80 x 60
Spatial resolution	0.6 mRad	0.8 mRad	0.8 mRad	1.31 mRad	1.31 mRad	1.31 mRad	1.31 mRad	1.31 mRad	1.75 mRad	2.0 mRad	2.4 mRad	2.4 mRad	2.8 mRad	2.8 mRad	3.9 mRad	3.9 mRad	5.2 mRad	7.8 mRad
Field of view	32.4° x 24.7°	30.9° x 23.1°	30.9° x 23.1°	24° x 17°	24° x 17°	24° x 17°	24° x 17°	24° x 17°	24° x 17°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°
Distance to spot	1765:1	1200:1	1200:1	753:1	753:1	753:1	753:1	753:1	565:1	504:1	409:1	409:1	346:1	346:1	252:1	252:1	189:1	126:1
Thermal sensitivity	50 mK	30 mK	30 mK	45 mK, 30 mK Filter Mode	50 mK, 40 mK Filter Mode	50 mK	50 mK, 30 mK Filter Mode	50 mK	50 mK	80 mK	80 mK	80 mK	80 mK	80 mK	90 mK	90 mK	100 mK	150 mK
Temperature range	-40 °C to +1200 °C (-4 °F to +2192 °F)	-40 °C to +1200 °C (-4 °F to +2192 °F)	-40 °C to +1200 °C (-4 °F to +2192 °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)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +650 °C (-4 °F to +1202 °F)	-20 °C to +550 °C (-4 °F to +1022 °F)	-20 °C to +550 °C (-4 °F to +1022 °F)	-20 °C to +550 °C (-4 °F to +1022 °F)	-20 °C to +450 °C (-4 °F to +842 °F)	-20 °C to +450 °C (-4 °F to +842 °F)	-20 °C to +350 °C (-4 °F to +662 °F)	-20 °C to +350 °C (-4 °F to +662 °F)	20 °C to +350 °C (-4 °F to +662 °F)	-20 °C to +250 °C (-4 °F to +482 °F)
Focus systems	LS, AF, MF, ES	LS, AF, MF, ES	AF, MF, ES	MSF, LS, AMF	MSF, LS, AMF	MSF, LS, AMF	MSF, LS, AMF	LS, AMF	LS, AMF	MF	MF	FF	MF	FF	MF	FF	FF	FF
Laser distance meter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-
Image enhancement	IRF, PIP, SR	IRF, PIP, SR	IRF, PIP	IRF, PIP, SR	IRF, PIP, SR	IRF, PIP, SR	IRF, PIP, SR	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF	-
Annotation	VA, TA	VA, TA	VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA	IRPN, VA	IRPN, VA	IRPN, VA	IRPN, VA	VA	VA	-	-
Standard video rec.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-
Radiometric video rec.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-
Optional lenses	7	7	7	4	4	4	3	3	3	-	-	-	-	-	-	-	-	-

AF: Auto focus | AMF: Advanced manual focus | ES: EverSharp multifocal recording | FF: Fixed Focus | IRF: IR Fusion® Auto Blend | IRPN: IR-PhotoNotes™ | LS: LaserSharp® Auto Focus System
 MF: Manual focus | MSF: MultiSharp™ Focus | PIP: Picture-in-Picture | SR: SuperResolution | TA: Text Annotation | VA: Voice Annotation

¹High temperature option—request at time of order: up to 2,000 °C (3,632 °F)
 Prices shown are in US dollars

Compare Fluke thermal imager models

	Expert Series Thermal Imagers						Professional Series Thermal Imagers			Performance Series Thermal Imagers								
	TiX1000	TiX660	TiX640	TiX560	TiX520	TiX500	Ti450	Ti400	Ti300	TiS75	TiS65	TiS60	TiS55	TiS50	TiS45	TiS40	TiS20	TiS10
IFOV (spatial resolution)	0.6 mRad	0.8 mRad	0.8 mRad	1.31 mRad					1.75 mRad	2.0 mRad	2.4 mRad		2.8 mRad		3.9 mRad		5.2 mRad	7.8mRad
Detector resolution	1024 x 768 (786,432 pixels) SuperResolution mode: 2048 x 1536 (3,145,728 pixels)	640 x 480 (307,200 pixels) SuperResolution mode: 1280 x 960 (1,228,800 pixels)	640 x 480 (307,200 pixels)	320 x 240 (76,800 pixels) SuperResolution mode: 640 x 480 (307,200 pixels)			320 x 240 (76,800 pixels)	240 x 180 (43,200 pixels)	320 x 240 (76,800 pixels)	260 x 195 (50,700 pixels)		220 x 165 (36,300 pixels)		160 x 120 (19,200 pixels)		120 x 90 (10,800 pixels)	80 x 60 (4,800 pixels)	
Field of view	32.4° H x 24.7° V	30.9° H x 23.1° V		24° H x 17° V					35.7° H x 26.8° V									
Optional lenses	Capture spectacular images close up or from a distance with optional lenses: 2 wide angle, 2 telephoto, 3 macro and 1 standard			Capture spectacular images close up or from a distance with pre-calibrated smart optional lenses: Wide angle, 2x and 4x telephoto, 25 micron macro			Optional 2x and 4x telephoto and wide angle pre-calibrated smart lenses available			—								
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 ¹																	
IR-Fusion*	AutoBlend™ mode, continuous blending						AutoBlend™ mode			5 presets (0 %, 25 %, 50 %, 75 %, 100 %)						3 presets (0 %, 50 %, 100 %)	—	
Picture-In-Picture (PIP)	Picture-in-Picture									5 presets (0 %, 25 %, 50 %, 75 %, 100 %)								—
Focus system	LaserSharp® Auto Focus, auto focus, manual focus, and EverSharp multifocal recording		Auto focus, manual focus, and EverSharp multifocal recording		MultiSharp™ Focus, 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		Manual focus	Fixed focus	Manual focus	Fixed focus	Manual focus	Fixed focus		
Display	5.6 inch color TFT display, 1280 x 800 pixel resolution, suitable for daylight operation			5.7 inch touchscreen LCD, 640 x 480 pixel resolution					3.5 inch touchscreen LCD, 640 x 480 pixel resolution			3.5 inch (landscape) 320 x 240 LCD						
Design	Camcorder with handle, Tilttable LCoS color viewfinder display, 800 x 600 pixel resolution		Camcorder		Ergonomic FlexCam design with a 240 degree articulating lens				Rugged, ergonomic design for one-handed use			Rugged, lightweight, ergonomic design for one-handed use						
Thermal sensitivity	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.03 °C at 30 °C target temp (30 mK)		≤ 0.045 °C at 30 °C target temp (45 mK); Filter Mode (NETD improvement) ≤ 0.03 °C at 30 °C target temp (30 mK)	≤ 0.05 °C at 30 °C target temp (50 mK); Filter Mode (NETD improvement) ≤ 0.04 °C at 30 °C target temp (40 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.05 °C at 30 °C target temp (50 mK); Filter Mode (NETD improvement) ≤ 0.03 °C at 30 °C target temp (30 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)		≤ 0.08 °C at 30 °C target temp (80 mK)			≤ 0.09 °C at 30 °C target temp (90 mK)		≤ 0.10 °C at 30 °C target temp (100 mK)	≤ 0.15 °C at 30 °C target temp (150 mK)		
Temperature measurement range	-40 °C to +1200 °C (-40 °F to +2192 °F) High temperature option—request at time of order: up to 2000 °C (3632 °F)		-40 °C to +1200 °C (-40 °F to +2192 °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)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +650 °C (-4 °F to +1202 °F)	-20 °C to +550 °C (-4 °F to +1022 °F)		-20 °C to +450 °C (-4 °F to +842 °F)		-20 °C to +350 °C (-4 °F to +662 °F)		-20 °C to +350 °C (-4 °F to +662 °F)	-20 °C to +250 °C (-4 °F to +482 °F)		
Frame rate	30 Hz or 9 Hz versions	60 Hz or 9 Hz versions																
Subwindowing modes available: (add-on at time of order—subwindowing options are not available on 9 Hz models)	Option 1: 640 x 480 (60 fps) Option 2: 384 x 288 (120 fps) Option 3: 1024 x 96 (240 fps)	Option 1: 384 x 288 (120 fps) Option 2: 640 x 120 (240 fps)		—														
Software	SmartView® software—full analysis and reporting software and Fluke Connect® system ¹																	
Voice annotation	60 seconds maximum recording time per image, reviewable playback on camera; Bluetooth headset provided (where available)						60 seconds maximum recording time per image; reviewable playback on camera; optional bluetooth headset available but not required			60 seconds maximum recording time per image, reviewable playback on camera; Bluetooth headset available separately (where available)						—		
Text annotation	Yes									—								
Video recording	Standard and radiometric																	
Streaming video (remote display)	Via HDMI; GigE Ethernet available in SmartView® software			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						Yes, to SmartView® software on a PC or to the Fluke Connect® app on a smartphone								
Remote control operation	Yes			Yes, through SmartView® software or Fluke Connect® mobile app			—			Yes, through SmartView® software or Fluke Connect® mobile app			—					
Alarms	High temperature, low temperature, and isotherms (within range)												High temperature, low temperature		—			
Warranty	Two-years (standard), extended warranties are available																	

¹Fluke Connect® not available in all countries.