

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
- Generation/transmission
- Oil and gas predictive maintenance
- Research and development
 - Electrical
 - Mechanical
 - Biology/sciences
- Quality control


- Industrial maintenance
- Heavy commercial facility maintenance
- Oil and gas maintenance
- Veterinary

- Reliability inspections
- Heavy building diagnostics
 - Building envelope
 - Construction defects
- Electrical, water, gas utilities

- Electrical inspections
- HVACR inspections
- Mechanical
- Residential home inspections

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



	TiX560 SKU 38RX06	TiX520 SKU 38RX05	Ti400 SKU 23NT33	Ti300 SKU 23NT32	Ti200 SKU 23NT31	Ti125 SKU 13T382	Ti110 SKU 13T380	Ti105 SKU 42X235	Ti100 SKU 13T379	Ti95 SKU 31FM99	Ti90 SKU 31FM98
Detector resolution	320 x 240, 640 x 480 Super Res.	320 x 240, 640 x 480 Super Res.	320 x 240	240 x 180	200 x 150	160 x 120	160 x 120	160 x 120	160 x 120	80 x 80	80 x 60
Spatial resolution	1.31 mRad	1.31 mRad	1.31 mRad	1.75 mRad	2.09 mRad	3.39 mRad	3.39 mRad	3.39 mRad	3.39 mRad	5.6 mRad	5.6 mRad
Field of view	24° x 17°	24° x 17°	24° x 17°	24° x 17°	24° x 17°	22.5° x 31°	22.5° x 31°	22.5° x 31°	22.5° x 31°	26° x 26°	19.5° x 26°
Thermal sensitivity	50 mK	50 mK	50 mK	50 mK	75 mK	100 mK	100 mK	100 mK	100 mK	100 mK	150 mK
Temperature range	-20 °C to +1200 °C (-4 °F to +2192°F)	-20 °C to +850 °C (-4 °F to +1562°F)	-20 °C to +1200 °C (-4 °F to +2192°F)	-20 °C to +650 °C (-4 °F to +1202°F)	-20 °C to +650 °C (-4 °F to +1202°F)	-20 °C to +350 °C (-4 °F to +662 °F)	-20 °C to +250 °C (-4 °F to +482 °F)	-20 °C to +250 °C (-4 °F to +482 °F)	-20 °C to +250 °C (-4 °F to +482 °F)	-20 °C to +250 °C (-4 °F to +482 °F)	-20 °C to +250 °C (-4 °F to +482 °F)
Focus systems	LS, AMP	LS, AMP	LS, AMP	LS, AMP	LS, AMP	OF	OF	FF	FF	FF	FF
Laser distance meter	Yes	Yes	Yes	Yes	Yes	—	—	—	—	—	—
Image enhancement	IRF, SR, IS	IRF, SR	IRF	IRF	IRF	IRF	IRF	IRF	—	PIP	—
Annotation	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA	IRPN, VA	IRPN, VA	IRPN, VA	—	—	—	—
Standard video rec.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	—	—	—	—
Radiometric video rec.	Yes	Yes	Yes	Yes	Yes	Yes	—	—	—	—	—
Optional lenses	Yes	Yes	Yes	Yes	Yes	—	—	—	—	—	—
 Built with FLUKE CONNECT™	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

AF: Auto focus | AMP: Advanced manual focus | ES: EverSharp multifocal recording | FF: Fixed Focus | IRF: IR Fusion Auto Blend | IRPN: IR PhotoNotes | IS: Image Sharpening | LS: LaserSharp® Auto Focus System | MF: Manual focus | OF: IR-OptiFlex Focus System | SR: SuperResolution | TA: Text Annotation | VA: Voice Annotation

Compare Fluke thermal imager models

	Expert Series Thermal Imagers		Professional Series Thermal Imagers			Performance Series Thermal Imagers					
	TiX560 SKU 38RX06	TiX520 SKU 38RX05	Ti400 SKU 23NT33	Ti300 SKU 23NT32	Ti200 SKU 23NT31	Ti125/TiR125 SKU 13T382/13T383	Ti110/TiR110 SKU 13T380/13T381	Ti105/TiR105 SKU 42X235/42X236	Ti100 SKU 13T379	Ti95 SKU 31FM99	Ti90 SKU 31FM98
IFOV (spatial resolution)	1.31 mRad		1.75 mRad		2.09 mRad		3.39 mRad			5.6 mRad	
Detector resolution	320 x 240 (76,800 pixels) SuperResolution mode: 640 x 480 (307,000 pixels)		320 x 240 (76,800 pixels)		240 x 180 (43,200 pixels)		200 x 150 (30,000 pixels)		160 x 120 (19,200 pixels)		
Field of view	24° H x 17° V					22.5° H x 31° V			26° H x 26° V		19.5° H x 26° V
Optional lenses	Optional telephoto and wide angle 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					Fluke Connect™ app compatible with included wireless SD card ¹					
Focus system	LaserSharp® Auto Focus with built-in laser distance meter and advanced manual focus					IR-OptiFlex™ focus system (focus free and manual focus)		Fixed focus			
IR-Fusion® technology/visible context	IR-Fusion® AutoBlend™ mode and Picture-in-Picture, continuous blending		IR-Fusion® AutoBlend™ mode and Picture-in-Picture			IR-Fusion® AutoBlend™ mode (on camera mid IR only) and Picture-in-Picture		—	IR-Fusion® Picture-in-Picture (AutoBlend™ mode available in SmartView® software)		Full visible available on camera (IR-Fusion® AutoBlend™ mode available in SmartView® software)
Display	5.7 inch touchscreen LCD, 640 x 480 pixel resolution		3.5 inch touchscreen LCD, 640 x 480 pixel resolution			3.5 in diagonal (portrait format)					
Design	Ergonomic FlexCam design with a 180 degree articulating lens		Rugged, ergonomic design for one-handed use			Rugged, lightweight, ergonomic design for one-handed use					
Thermal sensitivity	≤ 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)		≤ 0.075 °C at 30 °C target temp (75 mK)	Standard models: ≤ 0.10 °C at 30 °C target temp (100 mK) TiR models: ≤ 0.08 °C at 30 °C target temp (80mK)			≤ 0.10 °C at 30 °C target temp (100mK)		≤ 0.15 °C at 30 °C target temp (150 mK)
Temperature measurement range	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +850 °C (-4 °F to +1562 °F)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +650 °C (-4 °F to +1202 °F)		-20 °C to +350 °C (-4 °F to +662 °F) TiR125: -20 °C to +150 °C (-4 °F to +302 °F)	-20 °C to +250 °C (-4 °F to +482 °F) TiR110 and TiR105: -20 °C to +150 °C (-4 °F to +302 °F)		-20 °C to +250 °C (-4 °F to +482 °F)		
Frame rate	60 Hz or 9 Hz versions					30 Hz or 9 Hz versions (TiR models: 9 Hz only)			9 Hz		
Software	SmartView® software and Fluke Connect™ ¹										
Voice annotation	Yes					—					
Text annotation	Yes		—			—					
Video recording	Standard and radiometric					Standard		—			
Streaming video (remote display)	Via USB or WiFi					Via USB to PC		—			
Remote control	Yes	—	Yes		—						
Alarms	High temperature, low temperature, and isotherm					High temperature and low temperature	High temperature	—			
Warranty	Two-years (standard), extended warranties are available										

¹Fluke Connect™ not available in all countries.

For more information contact your Grainger Representative or visit Grainger.com®

