HANDHELD

Where used

- Electrical inspections
- HVAC/R inspections
- Mechanical
- Residential home inspections
- Light commercial maintenance
- Industrial maintenance
- Chemical processing
- Oil and gas processing
- Reliability inspections (PdM)
- Light utility inspections
- Water and wastewater
- Building diagnostics
  - Building envelope
  - Commercial/industrial facilities

FLUKE®

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

	TiS75+	TiS60+	TiS55+	TiS20+/TiS20+ MAX	PTi120 400C
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 400 °C (–4 °F to 752 °F)
Focus system	Manual focus	Fixed Focus	Manual 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	8.9 cm (3.5 in) 640 x 480 landscape touchscreen LCD	8.9 cm (3.5 in) 320 x 240 landscape LCD	8.9 cm (3.5 in) 640 x 480 landscape touchscreen LCD	8.9 cm (3.5 in) 320 x 240 landscape 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, use on-screen keyboard to type a note	–	After IS2 capture, use on-screen keyboard to type a note	After IS2 capture, use on-screen keyboard to type a note	
IR-PhotoNotes	Yes. Up to 3 extra user-selectable visible light image capture to be included in IS2 file.		Yes. Up to 1 extra user-selectable visible light image capture to be included in IS2 file.	No	
Video recording	Standard and radiometric video, mp4 and is3	–			
Remote display	No	Yes, see a live stream of camera display on your PC, smartphone, or monitor	No		
Auto capture	Yes	Yes	Yes	No	
Battery life	≥ 3.5 hours continuous use without WiFi (Actual life depends on settings and usage)	≥ 4 hours continuous use without WiFi (Actual life depends on settings and usage)	≥ 3.5 hours continuous use without WiFi (Actual life depends on settings and usage)	≥ 5 hours continuous use without WiFi (Actual life depends on settings and usage)	≥ 2 hours continuous use without WiFi (Actual life depends on settings and usage)
Color alarms	High temperature, low temperature, inside or outside a set range, and dew point calculation	High temperature, low temperature, and isotherms (within range)	High temperature, low temperature, and inside or outside a set range	–	
Warranty	2-year				
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.

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

- 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
- Power generation/transmission
- Research and development
  - Electrical
  - Mechanical
  - Sciences
- Quality control

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	Ti300+	Ti401 PRO	Ti480 PRO	TiX501	TiX580
Infrared resolution	320 x 240 (76 800 pixels)		640 x 480 (307 200 pixels)		
SuperResolution	No		Software only – Captures and combines 4x the data to create a 1280 x 960 image	No	Camera and Software – Captures and combines 4x the data to create a 1280 x 960 image
IFOV (spatial resolution)	1.85 mRad	0.93 mRad			
Field of view	34° H x 24° V				
Thermal sensitivity*	≤ 0.075 °C at 30 °C target temp (75 mK)		≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.075 °C at 30 °C target temp (75 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)
Temperature range	–20 °C to 650 °C (–4 °F to 1202 °F)		–20 °C to 1000 °C (–4 °F to 1832 °F)	–20 °C to 650 °C (–4 °F to 1202 °F)	–20 °C to 1000 °C (–4 °F to 1832 °F)
MultiSharp™ Focus	No		Yes, automatically captures in focus objects at different distances using multiple images	No	Yes, automatically captures in focus objects at different distances using multiple images
Focus system	Laser Sharp™ Auto Focus calculation of distance for automatic focusing and 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				
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	8.9 cm (3.5 in) 640 x 480 touchscreen LCD			14.48 cm (5.7 in) 640 x 480 touchscreen LCD	
Frame rate	60 Hz or 9 Hz models				
Software	Full analysis and reporting software with access to Fluke Connect Desktop and SmartView Classic desktop software				
Voice annotation	Yes, 60 second maximum audio recording			Yes, 60 seconds maximum audio recording, Bluetooth headset required	
Text annotation	Yes. Including standard shortcuts as well as user programmable options				
IR-PhotoNotes	Yes. Up to 2 extra user-selectable visible light image capture to be included in IS2 file.	Yes. Up to 2 extra user-selectable visible light image capture to be included in IS2 file.	Yes. Up to 5 extra user-selectable visible light image capture to be included in IS2 file.	Yes. Up to 2 extra user-selectable visible light image capture to be included in IS2 file.	Yes. Up to 5 extra user-selectable visible light image capture to be included in IS2 file.
Video recording	Standard and radiometric. mp4 is3				
Remote display	Yes, see the live stream of the camera display on your PC or TV monitor. Use USB, WiFi hotspot, or WiFi network to Fluke Connect Desktop software on a PC; use WiFi hotspot to the Fluke Connect™ app on a smartphone; or use HDMI to a TV monitor				
Remote control	No, display only		Yes with Fluke Connect™ Desktop or SmartView Classic	No, display only	Yes with Fluke Connect™ Desktop or SmartView Classic
Auto capture	No	No	Yes	No	Yes
Battery life	2 hours to 3 hours continuous use for each battery pack (Actual life depends on settings and usage).				
Color alarms	Color alarms High temperature, low temperature, and isotherms (within range)				
Warranty	Warranty 2-year				

*Best possible **Fluke Connect™ not available in all countries.

ADD ON LENSES




	Wide Angle Lens LENS/WIDE2	4X Telephoto Lens LENS/4XTELE2	2X Telephoto Lens LENS/TELE2
IFOV (spatial resolution)	1.86 mRad (Except Ti 300+: 3.71 mRad)	0.17 mRad (Except Ti 300+: 0.34 mRad)	0.33 mRad (Except Ti 300+: 0.66 mRad)
Field of view	46° H x 34° V	6.0° H x 4.5° V	12° H x 9° V
Min focus distance	15 cm (approximately 6 in)	1.5 m (approximately 5 ft)	45 cm (approximately 18 in)

	25 Micron Macro Lens LENS/25MAC2***
Object size	7.8 mm x 5.8 mm
Focus distance	10.4 mm ± 1 mm (0.4 in)

***Not suitable for Ti300+.

MOUNTED

Where used

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

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

	RSE600/C	RSE300/C
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 Smartview R&D Desktop Software included	
Voice annotation	Yes, in Fluke SmartView R&D software	
Text annotation	Yes, in Fluke SmartView R&D software	
Video recording	Radiometric data streaming up to max of frame rate of camera (60 Hz/9 Hz) via Fluke SmartView R&D software, with exports to standard non-radiometric formats	
Remote display	Yes, see the live stream of the camera display on your PC via Smartview R&D software	
Remote control	Yes, through ethernet and Fluke SmartView R&D software	
Radiometric Data Streaming	Yes, max frame rate of camera model (60 Hz/9 Hz) through SmartView R&D software	
Alarms	Yes, in Fluke SmartView R&D software–high temperature, low temperature, and isotherms (within range)	
Warranty	2-year	

*Best possible

ADD ON LENSES (RSE600/C and RSE300/C)

	Wide Angle Lens 0.75X-WIDE-LENS	4X Telephoto Lens FLK-4X-LENS	2X Telephoto Lens FLK-2X-LENS
IFOV (spatial resolution)	RSE600/C: 0.93 mRad RSE300/C: 1.85 mRad	RSE600/C: 0.24 mRad RSE300/C: 0.48 mRad	RSE600/C: 0.47 mRad RSE300/C: 0.94 mRad
Field of view	45° H x 32° V	8.5° H x 6.0° V	17° H x 12° V
Min focus distance	15 cm (approximately 6 in)	1.5 m (approximately 5 ft)	45 cm (approximately 18 in)

	25 Micron Macro Lens MACRO-LENS
Object size	11 mm x 8.25 mm
Focus distance	10.8 mm ± 1 mm (0.4 in)

INDUSTRIAL AUTOMATION

Fluke Process Instruments provides 24/7 thermal imaging solutions for process monitoring and control, product monitoring, quality pass/fail checks, and on-site safety.

Where used

- Automotive and aerospace
  - Backlight inspection
  - Heated car seat inspection
  - Laser plastic welding
  - Hot forming steel panels
  - Galvanizing and annealing
- Metals processing
  - Foundry ladle and torpedo car monitoring
  - Blast furnace
  - Continuous casting
  - Hot rolling mills
- Utilities
  - Substation monitoring
  - Coal pile monitoring
- Solar and semiconductor
  - Circuit board testing

FLUKE® Process Instruments

	ThermoView TV30 SA and GigE Thermal Imager	ThermoView TV40 Thermal Imager
Temperature range	–10 °C to 1300 °C (14 °F to 2372 °F)	–10 °C to 1200 °C (14 °F to 2192 °F)
Measurement accuracy	Down to ± 2 °C or ± 2 °C % (reading)	
Infrared resolution	320 x 240 (76,800 pixels) and 640 x 480 (307,200 pixels)	
Frame rate	9 or 60 frames/second	
Spectral range	8 – 14 µm	
Detector	Uncooled focal plane array	
Focus range	Standard: 220 mm (8.7 in) to ∞ Wide Angle: 100 mm (4.0 in) to ∞ Telephoto: 190 mm (7.5 in) to ∞ Motorized remote focus	IR 15 cm – ∞ (motorized remote focus), Visible Light: 60 cm – ∞
Emissivity correction	0.10 to 1.00	
Supported protocols	MQTT, OPC UA, TCP, DHCP, UDP, MDNS (Bonjour)	–
Power supply	24 VDC ± 20 % or PoE (IEEE 802.3at)	DC + 12 to 26V or PoE (Power over Ethernet)
Operating temperature	–10 °C to 50 °C (14 °F to 122 °F)	
Storage temperature	–20 °C to 70 °C (–4 °F to 158 °F)	–20 °C to 50 °C (–4 °F to 122 °F)
Humidity	Operating and storage 10 % to 95 %, non-condensing	
Shock resistance	IEC 60068-2-27 (mechanical shock): 50 G, 6 ms, 3 axis	
Vibration resistance	IEC 60068-2-26 (sinusodial shock): 3 G, 11 to 200 Hz, 3 axis	
Environmental protection	IP67 with all lenses installed	IP67 (NEMA 4)
Dimensions (W x H x L)	Approximately 50 mm x 50 mm x 133 mm (1.96 in x 1.96 in x 5.23 in)	Approximately 83 mm x 83 mm x 158 mm (3.25 in x 3.25 in x 6.22 in)
EMI, RFI, EMC	EN 61326-1:2013 IEC 61326-1:2013; (Industrial)	EC – Directive 2014/30/EU – EMC
EC Directive 2011/65/EU	RoHS Compliance amended by Directive (EU) 2015/863	EC – Directive 2011/65/EU – RoHS II
KCC	Electromagnetic Compatibility applies to use in Korea. This product meets industrial (Class A) electromagnetic wave equipment requirements.	
Lens options	30° x 22° Standard 22° x 16° Telephoto 48° x 36° Wide Angle	0.75x Wide Lens (45° x 34°) 2x Lens (17° x 12.7°) 4x Lens (8.5° x 6°) Macro Lens
Software	SA camera: on-board, directly integrate process without a PC. Camera setup via web interface GigE camera: ThermoView Lite, ThermoView Software, ThermoView EtherNet/IP, ThermoView Modbus, ThermoView Critical Asset, ThermoView Backlight	ThermoView Lite, ThermoView Software, ThermoView EtherNet/IP, ThermoView Modbus, ThermoView Critical Asset, ThermoView Backlight

More information: **https://www.flukeprocessinstruments.com/en-us/products/imaging-solutions/thermal-imaging-solutions**