FLUKE®

Ti400, Ti300 and Ti200 Thermal Imagers with LaserSharp® Auto Focus
The Fluke Professional Series

Fluke Thermal Imagers
Experience. Performance. Confidence.

- Get an in-focus image like never before with a touch of a button. **LaserSharp® Auto Focus**, exclusive to Fluke, uses a built-in laser distance meter that calculates and displays the distance from your designated target with pinpoint accuracy

- **Brilliantly detailed quality images.** Pixel for pixel the best spatial resolution available[1]

- **Precisely blended visual and infrared images** with crucial details to assist in identifying potential problems—IR-Fusion® technology with AutoBlend™ mode

- **Standard and radiometric video recording and video streaming**

- **Text and voice recording/annotation** allows you to save additional details to image files

- **See the details you need** with interchangeable smart lenses—2x and 4x telephoto and wide angle—no calibration required, interchangeable between compatible thermal imagers

[1] Comparison is based on competitive models with the same detector resolution.

SUPERIOR IMAGE QUALITY

SPATIAL RESOLUTION
Ti400
1.31 mRad

Ti300
1.75 mRad

Ti200
2.09 mRad

RESOLUTION
Ti400
320 x 240 (76,800 pixels)
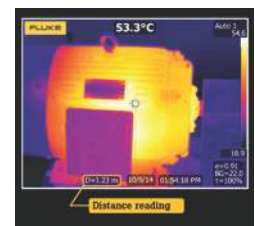
Ti300
240 x 180 (43,200 pixels)

Ti200
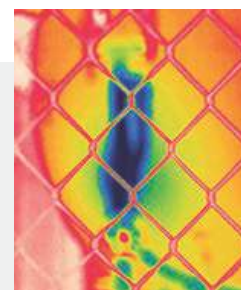*200 x 150 (30,000 pixels)*

FIELD OF VIEW
Ti400, Ti300, Ti200
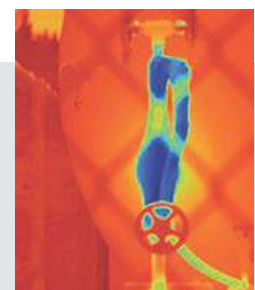*24 °H x 17 °V*

AutoFocus Redesigned

LaserSharp® Auto Focus, uses a built-in laser distance meter that calculates the distance to your designated target with pinpoint accuracy.

Many inspection sites are challenging for certain autofocus systems.

Passive autofocus systems may only capture the near-field subject (chain link fence).

LaserSharp® Auto Focus with a built-in laser distance meter clearly captures your designated target.

Detailed specifications

	Ti400	Ti300	Ti200
Key features			
IFOV with standard lens (spatial resolution)	1.31 mRad, D:S 764:1	1.75 mRad, D:S 573:1	2.09 mRad, D:S 477:1
Detector resolution	320 x 240 (76,800 pixels)	240 x 180 (43,200 pixels)	200 x 150 (30,000 pixels)
Field of view	24 °H x 17 °V		
Minimum focus distance	15 cm (approx. 6 in)		
IFOV with optional 2x telephoto smart lens	0.65 mRad, D:S 1528:1	0.87 mRad, D:S 1146:1	1.05 mRad, D:S 955:1
Field of view	12 °H x 9 °V		
Minimum focus distance	45 cm (approx. 18 in)		
IFOV with optional 4x telephoto smart lens	0.33 mRad, D:S 3056:1	0.44 mRad, D:S 2292:1	0.53 mRad, D:S 1910:1
Field of view	6.0 °H x 4.5 °V		
Minimum focus distance	1.5 m (approx. 5 ft)		
IFOV with optional wide-angle smart lens	2.62 mRad, D:S 399:1	3.49 mRad, D:S 299:1	4.19 mRad, D:S 249:1
Field of view	46 °H x 34 °V		
Minimum focus distance	15 cm (approx. 6 in)		
LaserSharp® Auto Focus	Yes, for consistently in-focus images. Every. Single. Time.		
Laser distance meter	Yes, calculates distance to the target for precisely focused images and displays distance on screen		
Advanced manual focus	Yes		
Wireless connectivity			
CNX™ Wireless System	Yes (where available)		
IR-Fusion® technology	Yes		
AutoBlend™ mode	Yes		
Picture-In-Picture (PIP)	Yes		
Ruggedized touchscreen display (capacitive)	8.9 cm (3.5 in) diagonal landscape color VGA (640 x 480) LCD with backlight		
Rugged, ergonomic design for one-handed use	Yes		
Thermal sensitivity (NETD)	≤ 0.05 °C at 30 °C target temp (50 mK)		≤ 0.075 °C at 30 °C target temp (75 mK)
Level and span	Smooth auto and manual scaling		
Fast auto toggle between manual and auto modes	Yes		
Fast auto-rescale in manual mode	Yes		
Minimum span (in manual mode)	2.0 °C (3.6 °F)		
Minimum span (in auto mode)	3.0 °C (5.4 °F)		
Built-in digital camera (visible light)	5 megapixel industrial performance		
Frame rate	60 Hz or 9 Hz versions		
Laser pointer	Yes		
LED light (torch)	Yes		
Data storage and image capture			
Extensive memory options	Removable micro SD memory card, on-board flash memory, save-to-USB flash drive capability, direct download via USB-to-PC connection		
Image capture, review, save mechanism	One-handed image capture, review, and save capability		
File formats	Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2); no analysis software required for non-radiometric (.bmp, .jpg and .avi) files		
Memory review	Thumbnail view navigation and review selection		
Software	SmartView® software and SmartView® Mobile App—full analysis and reporting software		
Export file formats with SmartView® software	BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF		
Voice annotation	60 seconds maximum recording time per image; reviewable playback on camera		
IR-PhotoNotes™	Yes		
Text annotation	Yes	—	
Video recording	Standard and radiometric		
File formats video	Non-radiometric (MPEG - encoded .AVI) and fully-radiometric (.IS3)		
Streaming video (remote display)	Via HDMI or WiFi hot spot in remote control mode	Via HDMI	
Remote control and operation (for special and advanced applications)	Yes	—	
Auto capture (temperature and interval)	Yes		

Detailed specifications

	Ti400	Ti300	Ti200
Battery			
Batteries (field-replaceable, rechargeable)	Two lithium ion smart battery packs with five-segment LED display to show charge level		
Battery life	Four+ hours continuous use per battery pack		
Battery charge time	2.5 hours to full charge		
Battery charging system	Two-bay battery charger or in-imager charging. Optional 12 V automotive charging adapter		
AC operation	AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz)		
Power saving	User selectable sleep and power off modes		
Temperature measurement			
Temperature measurement range (not calibrated below –10 °C)	–20 °C to +1200 °C (–4 °F to +2192 °F)	–20 °C to +650 °C (–4 °F to +1202 °F)	
Accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)		
On-screen emissivity correction	Yes (both value and table)		
On-screen reflected background temperature compensation	Yes		
On-screen transmission correction	Yes		
Color palettes			
Standard palettes	8: Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted		
Ultra Contrast™ palettes	8: Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra		
General specifications			
Color alarms (temperature alarms)	High-temperature and low-temperature		
Infrared spectral band	7.5 µm to 14 µm (long wave)		
Operating temperature	–10 °C to +50 °C (14 °F to 122 °F)		
Storage temperature	–20 °C to +50 °C (–4 °F to 122 °F) without batteries		
Relative humidity	10 % to 95 % non-condensing		
Center-point temperature measurement	Yes		
Spot temperature	Hot and cold spot markers		
User-definable spot markers	3 user-definable spot markers		
Center box	Expandable-contractible measurement box with MIN-MAX-AVG temp		
Safety	IEC 61010-1: Overvoltage category II, Pollution Degree 2		
Electromagnetic compatibility	IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A		
Australian RCM	IEC 61326-1		
US FCC	CFR 47, Part 15 Subpart B		
Vibration	0.03 g2/Hz (3.8 g), 2.5 g IEC 68-2-6		
Shock	25 g, IEC 68-2-29		
Drop	Engineered to withstand 2 meter (6.5 feet) drop with standard lens		
Size (H x W x L)	27.7 cm x 12.2 cm x 16.7 cm (10.9 in x 4.8 in x 6.5 in)		
Weight (battery included)	1.04 kg (2.3 lb)		
Enclosure rating	IEC 60529: IP54 (protected against dust, limited ingress; protection against water spray from all directions)		
Warranty	Two-years (standard), extended warranties are available		
Recommended calibration cycle	Two-years (assumes normal operation and normal aging)		
Supported languages	Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish		

Ordering information

FLK-Ti400 9Hz Thermal Imager, 9 Hz
FLK-Ti400 60Hz Thermal Imager, 60 Hz
FLK-Ti300 9Hz Thermal Imager, 9 Hz
FLK-Ti300 60Hz Thermal Imager, 60 Hz
FLK-Ti200 9Hz Thermal Imager, 9 Hz
FLK-Ti200 60Hz Thermal Imager, 60 Hz

Included

Thermal imager with standard infrared lens; ac power supply and battery pack charger (including universal ac adapters); two, rugged lithium ion smart battery packs; USB cable; HDMI video cable; SmartView® software available via free download; rugged, hard carrying case; soft transport bag; adjustable hand strap; warranty registration card.

Optional accessories

FLK-LENS/TELE2 Infrared Telephoto Lens
(2X magnification)
FLK-LENS/4XTELE2 Infrared Telephoto Lens
(4X magnification)
FLK-LENS/WIDE2 Infrared Wide Angle Lens
TI-CAR-CHARGER Car Charger
FLK-TI-VISOR3 Sun Visor
BOOK-ITP Introduction to Thermography Principles Book
TI-TRIPOD3 Tripod Mounting Accessory
FLK-TI-SBP3 Additional Smart Battery
FLK-TI-SBC3 Additional Smart Battery Charger

Visit the Fluke website to get complete details on these products or ask your local Fluke sales representative.

RF connection time (binding time) may take up to 1 minute.

The Expert Series

Go expert with the Fluke TiX520 or TiX560, and get maximum flexibility with an articulating lens that rotates a full 180 degrees and a 5.7 inch touchscreen LCD. Includes in-field analysis and post-capture image processing on camera, along with other expert-level features and more lens options.

Fluke. *Keeping your world up and running.*®