

Ti400, Ti300 and Ti200 Infrared Cameras with LaserSharp® Auto Focus The Fluke Professional Series

Technical Data



Now compatible with Fluke Connect™ Mobile App

Fluke Infrared Cameras 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.
- **Save Reporting Time.** Make better decisions faster than before. Organize your measurements by asset in one location with EquipmentLog™ history.
- **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
- **Extensive memory options**—Removable micro SD memory card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection

¹ Comparison is based on competitive cameras with the same detector resolution.



SUPERIOR IMAGE QUALITY

SPATIAL RESOLUTION

Ti400
1.31 mRad
Ti300
1.75 mRad
Ti200
2.09 mRad

RESOLUTION

Ti400
320x240 (76,800 pixels)
Ti300
240x180 (43,200 pixels)
Ti200
200x150 (30,000 pixels)

FIELD OF VIEW

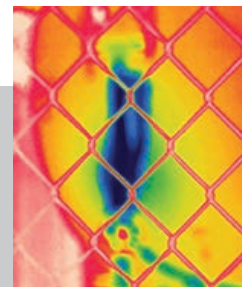
Ti400, Ti300, Ti200
24 °H x 17 °V

AutoFocus Redesigned

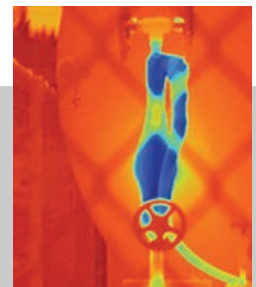
LaserSharp® Auto Focus, uses a built-in laser distance meter that calculates the distance to your designated target with pinpoint accuracy.



A difficult inspection site for auto focus systems.



This auto focus system only captures, the near field subject—the chain link fence.



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

	Ti400	Ti300	Ti200
Key features			
IFOV with standard lens (spatial resolution)	1.31 mRad	1.75 mRad	2.09 mRad
Detector resolution	320x240 (76,800 pixels)	240X180 (43,200 pixels)	200X150 (30,000 pixels)
Field of view	24 °H x 17 °V		
Minimum focus distance	15 cm (approx. 6 in)		
IFOV with optional telephoto lens	0.65 mRad	0.87 mRad	1.05 mRad
Field of view	12 °H x 9 °V		
Minimum focus distance	45 cm (approx. 18 in)		
IFOV with optional wide-angle lens	2.62 mRad	3.49 mRad	4.19 mRad
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	Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN (where available)		
Fluke Connect™ app compatible	Yes (where available)		
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 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, Fluke Connect™ (where available), 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 USB or WiFi hot spot		
Remote control and operation (for special and advanced applications)	Yes	—	
Auto capture (temperature and interval)	Yes		

	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/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

Kits

- FLK-TI400 60HZ/FCA* Thermal Imager, 3000 FC DMM, a3001FC iFlex Module
- FLK-TI300 60HZ/FCA* Thermal Imager, 3000 FC DMM, a3001FC iFlex Module
- FLK-TI200 60HZ/FCA* Thermal Imager, 3000 FC DMM, a3001FC iFlex Module
- FLK-TI400 60HZ/FCC* Thermal Imager, 3-a3001FC iFlex Modules, 805 Vibration Tester
- FLK-TI400 9HZ/FCA Thermal Imager, 3000 FC DMM, a3001FC iFlex Module
- FLK-TI300 9HZ/FCA Thermal Imager, 3000 FC DMM, a3001FC iFlex Module
- FLK-TI200 9HZ/FCA Thermal Imager, 3000 FC DMM, a3001FC iFlex Module
- FLK-TI400 9HZ/FCC Thermal Imager, 3-a3001FC iFlex Modules, 805 Vibration Tester

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

***Only available in certain countries.**

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



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CONNECT™**

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Fluke Connect with ShareLive™ is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect mobile app is available for Android™ (4.3 and up) and iOS (4s and later) and works with over 20 different Fluke products—the largest system of connected test tools in the world. And more are on the way. Go to the Fluke website to find out more.

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The Expert Series

The Fluke Expert Series offers the best flexibility of the entire Fluke infrared camera portfolio to capture spectacular images close up or from a distance. The TiX1000, TiX660 and TiX640 are compatible with 8 lens options (2x and 4x telephoto lenses, 2 wide angle lenses, 3 macro lenses and 1 standard lens) so great images can be captured despite certain obstacles.



Fluke. Keeping your world up and running.®

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