

Ti125, Ti110, Ti105, Ti100 Industrial-Commercial Infrared Cameras

Technical Data

Now compatible with Fluke Connect™ Mobile App

Rugged and reliable troubleshooting infrared cameras

A Fluke infrared camera can save you time and money by finding potential problems before they become costly failures. Industrial professionals bring Fluke infrared cameras to the job because they do the job. Over 65 years of industrial experience give Fluke infrared tools the level of performance needed to keep you up and running. With the innovative features and functionality in the Fluke Ti125, Ti110, Ti105 and Ti100 infrared cameras, you can perform infrared inspections faster and more efficiently.

- The combination of great resolution with an optimized field of view provides brilliant detail and ensures quality images captured from a safe distance.
- Exclusive IR-OptiFlex™ focus system – ensures that images are in good focus from 1.2 meters (4 feet) and beyond for optimum image clarity and scanning convenience. For shorter distances change to manual mode with the touch of a finger (Ti110 and Ti125).
- Entire line up of infrared cameras is compatible to Fluke Connect™ – the largest network for wirelessly enabled tools.
- Find problems faster and easier with Fluke IR-Fusion® technology (Ti125, Ti110, Ti105). Accurately identify potential issues by combining digital and IR images.
- Get further clarification with AutoBlend™ mode – the blending of a digital and partially transparent IR image into a single information-filled image
- Multi-mode video recording – focus-free video in visible light and infrared with full IR-Fusion (Ti110 and Ti125 only).

Spend less time finding problems and more time solving them with the innovative, rugged and easy-to-use Ti125, Ti110, Ti105 and Ti100 infrared cameras.



Patented Fluke IR-Fusion® Technology

Enjoy the industry's only point-and-shoot IR-Fusion camera. Fluke patented technology provides the user with both a digital and an infrared image in one to precisely document problem areas.

IR-OptiFlex™ focus system

Scan for issues significantly faster than before with Fluke's revolutionary, ultra-rugged focus system. The IR-OptiFlex focus system gives you optimum focus by combining focus-free, ease-of-use with the flexibility of manual focus on the same camera.



Built with
**FLUKE
CONNECT™**

See it. Save it. Share it. All the facts, right in the field.

Fluke Connect with ShareLive™ video call 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 suite of connected test tools in the world. And more are on the way. Go to the Fluke website to find out more.

Make the best decisions faster than ever before by viewing all temperature, mechanical, electrical and vibration measurements for each equipment asset in one place. Get started saving time and increasing your productivity.

Download the app at:



Smart phone not included with purchase.



Detailed specifications

	Ti125	Ti110	Ti105	Ti100
Temperature measurement				
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +350 °C (-4 °F to +662 °F)		-20 °C to +250 °C (-4 °F to +482 °F)	
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)			
On-screen emissivity correction	Yes			
On-screen reflected background temperature compensation	Yes			
On-screen transmission correction	Yes		No	
Imaging performance				
Image capture frequency	9 Hz or 30 Hz versions			
Detector type	uncooled microbolometer, 160 x 120			
Thermal sensitivity (NETD)	≤ 0.10 °C at 30 °C target temp (100 mK) Filtered mode to get to 80 mK		≤ 0.10 °C at 30 °C target temp (100 mK)	
Total pixels	19,200			
Infrared spectral band	7.5 μm to 14 μm (long wave)			
Visual (visible light) camera	2 megapixel industrial-grade			None - IR Only
Standard infrared lens type				
Field of view	22.5 °H x 31 °V			
Spatial resolution (IFOV)	3.39 mRad			
Minimum focus distance	15.25 cm (6 in)		46 cm (18 in)	
Focus mechanism				
Focus System	IR-OptiFlex™ focus system		Focus-free 1.2 m (4 ft) and beyond	
Image presentation				
Standard palettes	Blue-Red, Grayscale, Inverted Grayscale, High-contrast, Hot Metal, Ironbow, Amber, Inverted Amber		Blue-Red, Grayscale, Inverted Grayscale, High-contrast, Hot Metal, Ironbow, Amber	Blue-Red, Ironbow, Grayscale, Amber
Ultra Contrast™ palettes	Blue-Red, Grayscale, Inverted Grayscale, High-contrast, Hot Metal, Ironbow, Amber, Inverted Amber	Blue-Red, Grayscale, Ironbow	None	
Level and span	Manual and auto			
Fast auto toggle between manual and auto modes	Yes			
Fast auto-rescale in manual mode	Yes			
Minimum span (in manual mode)	2.5 °C			
Minimum span (in auto mode)	5 °C			
IR-Fusion® information				
Picture-In-Picture (PIP)	Yes		PIP (1.2 m (4 ft) to 4.6 m (15 ft))	No
AutoBlend™ mode	Yes	Yes	Yes (Mid IR Mode)	No
Color alarms (temperature alarms)	High temperature, low temperature, isotherm	High temperature, low temperature	High temperature	None
Image capture and data storage				
Image capture, review, save mechanism	One-handed image capture, review, and save capability			
Storage medium	SD Memory Card, direct download via USB-to-PC connection			
Image file formats	.IS2, .BMP, .JPEG			
Video file formats	.IS3, .AVI	None		
Export file formats with SmartView® software	BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF			
Memory review	Thumbnail view navigation and review selection			
Other time-saving and productivity features				
Voice annotation	Yes (60 seconds) per image		None	
IR-PhotoNotes™	Yes (3 images)			None
Wi-Fi connectivity	Yes, with included WiFi SD Card		Yes, with optional WiFi SD Card	
Text annotation*	None			
Video recording*	Yes (AVI with MPEG encoding, up to 5 minutes)	None		
Streaming Video	Streaming USB video output (infrared, visible and IR- Fusion modes)	None		
CNX™ Wireless System*	Yes			
Fluke Connect compatible	Yes, with included WiFi SD Card		Yes, with optional WiFi SD Card	
Auto capture (temperature and interval)*	None			
Remote control and operation (for special and advanced applications)	None			

	Ti125	Ti110	Ti105	Ti100
General specifications				
Operating temperature	-10 °C to +50 °C (14 °F to 122 °F)			
Storage temperature	-20 °C to +50 °C (-4 °F to 122 °F)			
Relative humidity	10 % to 95 %, non-condensing			
Ruggedized display (no touchscreen)	3.5 inch diagonal (portrait format)			
Controls and adjustments	User selectable temperature scale (°C/°F), Language selection, Time/Date set, Emissivity selection, Reflected background temperature compensation, Transmission correction and center point on image, User selectable hot spot and cold spot markers, 3 user definable spot markers on camera and in Smartview®, and center point on image, Expandable-contractable Measurement Box with MIN-AVG-MAX temp, Color Alarms - High temperature, low temperature, isotherm, User selectable backlight setting, Graphical information display preference	User selectable temperature scale (°C/°F), Language selection, Time/Date set, Emissivity selection, Reflected background temperature compensation, Transmission correction, 3 user definable spot markers on camera and in Smartview®, and center point on image, Expandable-contractable Measurement Box with MIN-AVG-MAX temp, Color Alarms - High temperature, low temperature, User selectable backlight setting, Graphical information display preference	User selectable temperature scale (°C/°F), Language selection, Time/Date set, Emissivity selection, Reflected background temperature compensation, 3 user definable spot markers on camera and in Smartview®, and center point on image, Expandable-contractable Measurement Box with MIN-AVG-MAX temp, Color Alarms - High temperature, User selectable backlight setting, Graphical information display preference	User selectable temperature scale (°C/°F), Language selection, Time/Date set, Emissivity selection, Reflected background temperature compensation, Center point temperature measurement, User selectable backlight setting, Graphical information display preference
Software	SmartView® and SmartView Mobile App – full analysis and reporting software			
Batteries	Two lithium ion rechargeable smart battery packs with five-segment LED display to show charge level, all models	One lithium ion rechargeable smart battery pack with five-segment LED display to show charge level		
Battery life	Four+ hours continuous use per battery pack (assumes 50 % brightness of LCD and average usage)			
Battery charge time	2.5 hours to full charge			
AC battery charging	Two-bay ac battery charger (110 V ac to 220 V ac, 50/60 Hz) (included), or in-imager charging. AC mains adapters included.	Optional Accessory		
AC operation	AC operation with included power supply (110 V ac to 220 V ac, 50/60 Hz)			
Power saving	User selectable sleep and power off modes			
Safety standards	CSA (US and CAN): C22.2 No. 61010-1-04, UL: UL STD 61010-1 (2nd Edition), ISA: 82.02.01			
Electromagnetic compatibility	EN 61326-1:2006 IEC 61326-1:2005			
C Tick	IEC/EN 61326-1			
US FCC	EN61326-1; FCC Part 5			
Vibration	2G, IEC 68-2-6			
Shock	25G, IEC 68-2-29			
Drop	2 m (6.5 ft)			
Size (H x W x L)	28.4 cm x 8.6 cm x 13.5 cm (11.2 in x 3.4 in x 5.3 in)			
Weight (battery included)	0.726 kg (1.6 lb)			
Enclosure rating	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			

FLK-Ti125 30HZ Industrial-Commercial Thermal Imager
FLK-Ti125 9HZ Industrial-Commercial Thermal Imager
FLK-Ti110 30HZ Industrial-Commercial Thermal Imager
FLK-Ti110 9HZ Industrial-Commercial Thermal Imager
FLK-Ti105 30Hz Industrial-Commercial Thermal Imager
FLK-Ti105 9HZ Industrial-Commercial Thermal Imager
FLK-Ti100 9HZ General Use Thermal Imager

Included with product

Thermal imagers are shipped with ac power adapter, lithium ion smart battery (Ti125 includes 2 each—other models 1 each), USB cable, SD memory card (Fluke Connect WiFi SD Card for Ti125 and Ti110 only), hard carrying case, soft transport bag, adjustable hand strap, printed users manual in English, Spanish, French, German and Simplified Chinese, others on CD, SmartView® software and warranty registration card. Ti125 model also include a two-bay charging base and a multi-format USB memory card reader.

Optional

FLK-TI-VISOR2 Sun Visor
FLK-TI-TRIPOD2 Tripod Mounting Accessory
BOOK-ITP Introduction to Thermography Principles Book
FLK-TI-SBC3 Additional Smart Battery
FLK-TI-SBP3 Additional Smart Battery Charger
TI-CAR CHARGER Car Charger

Fluke Connect Kits

FLK-TI125 30HZ/FCB Ti125 Thermal Imager with 3 a3001 iFlex 805 FC Kit
FLK-TI105 30HZ/FCA Ti105 Thermal Imager, 3000FC DMM, A3001FC iFlex Module, WiFi SD Card

Fluke Connect modules

FLK-a3000FC AC Current Clamp Module
FLK-a3001FC iFlex™ AC Current Clamp Module
FLK-a3002FC AC/DC Current Module
FLK-v3000FC AC Voltage Module
FLK-v3001FC DC Voltage Module
FLK-t3000FC K-Type Temperature Module
FLK-FC-SD 8GB Fluke Connect Wireless SD Card

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

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

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