

# Ti125, Ti110, Ti105, Ti100, Ti95 and Ti90 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, Ti100, Ti95 and Ti90 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, Ti100, Ti95 and Ti90 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™ and iOS and works with over 20 different Fluke products—the largest suite of connected test tools in the world. And more is 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	Ti95	Ti90	
IR resolution	160 x 120 uncooled microbolometer				80 x 80 uncooled microbolometer	80 x 60 uncooled microbolometer	
LCD display	3.5 inch diagonal (portrait format)						
Focus mechanism	IR-OptiFlex™ focus system		Focus-free 1.2 m (4 ft) and beyond		Focus-free 0.6 m (2 ft) and beyond		
IR-Fusion® technology	PIP, FULL IR, FULL VISIBLE, AutoBlend™	PIP, FULL IR, FULL VISIBLE	PIP (1.2 m (4 ft) to 4.6 m (15 ft)), FULL IR, FULL VISIBLE	No, full IR only	PIP (1.2 m (4 ft) to 4.6 m (15 ft)), FULL IR, FULL VISIBLE	FULL IR, FULL VISIBLE	
Visible camera	2 megapixel industrial-grade			None - IR Only	2 megapixel industrial-grade		
FOV (Field of view)	22.5 °H x 31 °V				26 °H x 26 °V	19.5 °H x 26 °V	
Ifov (Spatial resolution)	3.39 mRad				5.6 mRad		
Capture of refresh rate	9 Hz or 30 Hz versions				9 Hz only		
NETD (thermal sensitivity)	≤ 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)				
Level and span control	Manual and auto						
Minimum span in auto mode	5 °C						
Minimum span in manual mode	2.5 °C						
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	Blue-red, grayscale, high-contrast, hot metal, ironbow, amber	Blue-red, grayscale, high-contrast, hot metal, ironbow, amber	Blue-red, grayscale, ironbow	
Ultra Contrast™ palettes	Blue-Red, Grayscale, Inverted Grayscale, High-contrast, Hot Metal, Ironbow, Amber, Inverted Amber	Blue-Red, Grayscale, Ironbow	None				
<b>Temperature measurement</b>							
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)						
Centerpoint temperature measurement	Yes						
Centerbox (Min/Avg/Max)	Yes		None		Yes	None	
Emissivity correction	Yes		Yes				
Transmission correction	Yes		No				
Background (reflected) compensation	Yes						
Spectral band	7.5 µm to 14 µm (long wave)				9 µm to 15 µm (long wave)		
<b>Analysis, documentation and reporting</b>							
SmartView® Software	Included						
Fluke Connect™ compatible	Yes						
Fluke Connect™ WiFi SD Card included	Yes		No		None		
IR-PhotoNotes™ annotation system	Yes (3 images)				None		
Voice annotation (audio)	Yes (60 seconds) per image		No				
Multi-mode video output	Streaming USB video output (infrared, visible and IR-Fusion modes)	None					
Multi model video redording (standard avi w/ mpeg encoding)	Yes (AVI with MPEG encoding, up to 5 minutes)	None					
Multi-mode video recording (radiometric .is3)	Yes, radiometric .is3 for approxixm 2.5 to 5 minutes depending upon thermal scene	None					
Memory review	Thumbnail review						
<b>Troubleshooting features</b>							
Color alarms	High temperature, low temperature, isotherm	High temperature, low temperature	High temperature	None			
Hot/cold markers	Yes	None		Yes			
User definable spot markers	Three on camera and in SmartView®				None		
Laser pointer	Yes				None		
Torch	Yes				None		
<b>Built to last</b>							
Drop test	2 meter (6.5 feet)						
Ingress protection (IP) rating (IEC 60529)	IP54						
Standard warranty period	Two-years						
Extended warranty and service plans	Yes						
<b>Smart battery technology</b>							
Battery (field-replaceable, rechargeable)	Two		One				
Battery life	4+ hours (each)*						
External battery charging base	Yes	Optional (accessory)					
Charging power supply	Yes						

	Ti125	Ti110	Ti105	Ti100	Ti95	Ti90
<b>Other specifications</b>						
Weight	0.726 kg (1.6 lb)					
Size	28.4 cm x 8.6 cm x 13.5 cm (11.2 in x 3.4 in x 5.3 in)					
Minimum IR focus distance	15.25 cm (6 in)		122 cm (48 in)			
Minimum parallax	~45.7 – 55.9 cm (~ 18 in – 22 in)		~122 cm (48 in)	None - IR Only	~45.7 cm (18 in)	
Recommended Calibration cycle	Two years					
Multifunction card reader	Included		Optional (accessory)			
Memory storage	2 GB WiFi SD memory card		2 GB SD memory card			
Operating temperature range	-10 °C to +50 °C (14 °F to 122 °F)					
Storage temperature range	-10 °C to +50 °C (14 °F to 122 °F)					
Operating humidity	Operating and storage 10 % to 95 %, non-condensing					
Vibration and shock	2G, IEC 68-2-26 and 25G, IEC 68-2-29					
Safety standards	CSA (US and CAN): C22.2 No. 61010-1-04, UL: UL STD 61010-1 (2nd Edition), ISA: 82.02.01					
C Tick	IEC/EN 61326-1					
EMI, RFI, EMC	EN61326-1; FCC Part 5					
Users manuals	Czech, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish, Dutch, and Hungarian					

## Ordering information

**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  
**FLK-Ti95 9HZ** General Use Thermal Imager  
**FLK-Ti90 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 (except Ti90), 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** External charging base and power supply  
**FLK-TI-SBP3** Extra lithium-ion rechargeable smart battery  
**TI-CAR CHARGER** Thermal imager vehicle charger

### Fluke Connect Kits

**FLK-TI125 30HZ/FCB** Ti125 Thermal Imager, 3000FC DMM, a3001FC iFlex Module  
**FLK-TI105 30HZ/FCA** Ti105 Thermal Imager, 3000FC DMM, a3001FC iFlex Module  
**FLK-TI95 9HZ/FCA** Ti95 IR Camera with DMM a3001 FC iFlex Kit  
**FLK-TI95 9HZ/FCC** Ti95 IR Camera with 3 a3001 iFLEX 805 FC Kit

### 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 CARD** Fluke Connect Wireless SD Card



**Fluke Corporation**  
 PO Box 9090, Everett, WA 98206 U.S.A.

**Fluke Europe B.V.**  
 PO Box 1186, 5602 BD Eindhoven, The Netherlands

**For more information call:**  
 In the U.S.A. (800) 443-5853 or Fax (425) 446-5116  
 In Europe/M-East/Africa +31 (0) 40 2675 200 or Fax +31 (0) 40 2675 222  
 In Canada (800)-36-FLUKE or Fax (905) 890-6866  
 From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116  
 Web access: <http://www.fluke.com>

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