FLUKE®

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-Fusion®

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: ANDROID APP ON Google play | Available on the App Store

Smart phone not included with purchase.

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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, ironbow
Ultra Contrast™ palettes	Blue-Red, Grayscale, InvertedGrayscale, High-contrast, Hot Metal, Ironbow, Amber, Inverted Amber	Blue-Red, Grayscale, Ironbow	None			
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)					
Centerpoint temperature measurement	Yes					
Centerbox (Min/Avg/Max)	Yes			None	Yes	None
Emissivity correction	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)	
Analysis, documentation and reporting						
SmartView® Software	Included					
Fluke Connect™ compatible	Yes					
Fluke Connect™ WiFi SD Card included	Yes		No			
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 encording)	Yes (AVI with MPEG encoding, up to 5 minutes)	None				
Multi-mode video recording (radiometric .is3)	Yes, radiometric .is3 for approximx 2.5 to 5 minutes depending upon thermal scene	None				
Memory review	Thumbnail review					
Troubleshooting features						
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		
Built to last						
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					
Smart battery technology						
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
Other specifications						
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