FLUKE®

Ti125, Ti110 Industrial-Commercial and the Ti100 General Use Thermal Imagers

Technical Data

The lightest, most rugged and easiest-to-use professional thermal imagers around.

A Fluke thermal imager can save you time and money by finding potential problems before they become costly failures. With the innovative features and functionality in the Fluke Ti125, Ti110 and Ti100 imagers, you can perform infrared inspections faster and more efficiently and thoroughly document problem areas for additional follow-up.

Key features

- 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).
- Always have references handy—IR-PhotoNotes™ annotation system—Quickly identify and keep track of inspection locations by adding digital images of important information and surrounding areas (Ti110 and Ti125).
- Find problems faster and easier—IR-Fusion® with AutoBlend™ mode (Ti125 only)—Accurately identify potential issues by fusing digital and IR images with AutoBlend. It blends digital and partially transparent IR images 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).
- Easily communicate the location of problems with the Electronic Compass (8-Point Cardinal).

Spend less time finding problems and more time solving them with the innovative, rugged and easy to use Ti125, Ti110 Industrial-Commercial and Ti100 General Use Thermal Imagers.

Industrial, mechanical, electromechanical and general building maintenance.

Process, refractory insulation, tank and vessel levels, steam systems and traps, pipes and valves, etc.

Electrical, unbalanced loads, overloaded systems, wiring problems or component failure, etc.

IR-Fusion®

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.

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Detailed specifications

	Ti125	Ti110	Ti100
	Industrial-Commercial		General use
IR resolution (FPA size)	160 x 120 FPA Uncooled Microbolometer		
Spectral band	7.5 µm to 14 µm (long wave)		
Capture or refresh rate	9 Hz or 30 Hz versions		9 Hz
NETD (Thermal sensitivity)	≤ 0.10 °C at 30 °C target temp (100 mK)		
FOV (Field of view)	22.5 °H x 31 °V		
IFOV (Spatial resolution)	3.39 mRad		
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)		
Focus mechanism	IR-OptiFlex™ focus system		Focus-free 1.2 m (4 ft) and beyond
IR-Fusion® technology	PIP, FULL IR, FULL VISIBLE, AutoBlend	PIP, FULL IR, FULL VISIBLE	No, full IR only
Color alarms	High temperature, low temperature, isotherm	High temperature	—
Standard palettes	Blue-Red, Grayscale, Inverted Grayscale, High-contrast, Hot Metal, Ironbow, Amber, Inverted 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	—
Hot/cold markers	Yes	—	
User definable spot markers	Three on camera and in SmartView®		in SmartView® only
Centerbox (MIN/AVG/MAX)	Yes	—	
Level and span control	Manual and auto		
Minimum span in auto mode	5 °C		
Minimum span in manual mode	2.5 °C		
Minimum IR focus distance	15.25 cm (6 in)		1.2 m (4 ft)
Weight	0.726 kg (1.6 lb)		
Size	28.4 x 8.6 x 13.5 cm (11.2 x 3.4 x 5.3 in)		
LCD display	3.5 inch diagonal (portrait format)		
Visible camera	2 megapixel industrial-grade		N/A
Minimum automatic parallax correction	~18-22 inches		N/A
IR-PhotoNotes™ annotation system	Yes (3 images)		—
Laser pointer	Yes		
Torch	Yes		—
Electronic (cardinal) compass	Yes		—
Emissivity correction	Yes		
Transmission correction	Yes		—
Background (reflected) compensation	Yes		
Voice annotation (audio)	Yes (60 seconds) per image		—
Multi-mode video output	Streaming USB video output (infrared, visible and IR-Fusion modes)	—	
Multi-mode video recording (standard avi w/ mpeg encoding)	Yes (AVI with MPEG encoding, up to 5 minutes)		—
Multi-mode video recording (radiometric .Is3)	Yes, radiometric .is3 for approx. 2.5 to 5 minutes depending upon thermal scene	—	
Memory review	thumbnail review		
Battery (field-replaceable, rechargeable)	Two	One	
Battery life	4+ hours (each)*		
External battery charging base	Yes	Optional (accessory)	
Charging power supply	Yes		
Drop test	2 meter (6.5 feet)		
Ingress protection (IP) rating (IEC 60529)	IP 54		
Recommended Calibration cycle	Two-years		
Multifunction card reader	Included	—	
Memory storage	2 GB SD memory card		
Direct download capability	mini USB download direct to PC		
Operating temperature range	-10 °C to +50 °C (14 °F to 122 °F)		
Storage temperature range	-20 °C to +50 °C (-4 °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		
User manuals	Czech, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish, Dutch, and Hungarian		
Standard warranty period	Two-years		
Extended warranty and service plans	Yes		

*Assumes 50% brightness of LCD

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Ordering information

FLK-Ti110 30HZ	Industrial-Commercial Thermal Imager
FLK-Ti110 9HZ	Industrial-Commercial Thermal Imager
FLK-Ti125 30HZ	Industrial-Commercial Thermal Imager
FLK-Ti125 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, hard carrying case, soft transport bag, adjustable hand strap (left- or right-handed use), printed users manual in English, Spanish, French, German and Simplified Chinese, all other manuals on CD—total of 18, 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. *Not just infrared. Infrared you can use.™*

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