FLUKE ®

TiR125, TiR110 Building Diagnostic and the Ti100 General Use Thermal Imagers

Technical Data

Ti100

TiR110

TiR125

New

Made in the U.S.A. of U.S. and non U.S. parts

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

Whether you're searching for air leaks, hidden moisture, construction defects, or other building issues, a Fluke thermal imager delivers a huge competitive advantage—it allows you to work faster and more efficiently, and document your findings.

Key features

- Exclusive IR-OptiFlex™ focus system—ensures that images are in good focus from 1.2 m (4 ft) and beyond for optimum image clarity and scanning convenience. For shorter distances change to manual mode with the touch of a finger (TiR110 and TiR125).
- 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 (TiR110 and TiR125).
- Find problems faster and easier—IR-Fusion® with AutoBlend™ mode (TiR125 only)—Accurately identify potential issues by combining 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 (TiR110 and TiR125 only).
- Easily communicate the location of problems with the Electronic Compass (8-Point Cardinal).

Spend less time in the field and more time growing your business with these new Fluke thermal imagers.

Building problems, defects and general maintenance

Energy audit, building inspection, and weatherization

Restoration, water damage, and roofing

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.

Detailed specifications

	TiR125	TiR110	Ti100
	Buidling diagnostics		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		
NETD (Thermal sensitivity)	≤ 0.08 °C at 30 °C target temp (80 mK)		≤ 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 +150 °C (–4 °F to +302 °F)		–20 °C to + 250 °C (–14 °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 termperature, low temperature (dewpoint), and isotherm	Low temperature (dewpoint)	—
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	2.5 °C		5 °C
Minimum span in manual mode	2.0 °C		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 parallax	~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		—
Multi-mode video recording (standard AVI with MPEG encoding)	Yes (AVI with MPEG encoding)		—
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	Included	Optional (accessory)	
Charging power supply	Yes		
Drop test	2 meter (6.5 feet)		
Ingress protection (IP) rating (IEC 60529)	IP 54		
Est. calibration cycle	Two-years		
Multifunction card reader	Included	—	
Memory storage	2 GB SD memory card		
Direct download capability	mini USB direct download		
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

Ordering information

FLK-TiR110 9HZ   Building Diagnostics Thermal Imager
FLK-TiR125 9HZ   Building Diagnostics Thermal Imager
FLK-TI100 9HZ   General Use Thermal Imager

Included with product
Thermal imagers are shipped with ac power adapter, lithium ion smart battery (TiR125 includes two each—other models one 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. TiR125 model also includes 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