

Fluke Building Diagnostic Thermal Imagers

Models: TiR1 and TiR

Technical Data



High performance thermal imagers have never been this affordable. This rugged. Or, this easy to use ... until **now**.

The Fluke TiR1 and TiR Thermal Imagers are the perfect imagers for building envelope, restoration and remediation, inspection and roofing applications.

- These Fluke imagers come with IR-Fusion® Technology both in camera and software (combines visible image with IR image in full screen or picture-in-picture views) for easy identification and reporting of problems
- Rugged and reliable: Engineered to withstand a 2 m (6.5 ft) drop
- 9.1 cm (3.7 in) diagonal landscape color VGA (640 x 480) LCD
- Temperature range and thermal sensitivity optimized for building diagnostics applications
- Perfect for any application and budget
- Excellent thermal sensitivity for seeing even small temperature differences (which could indicate problems)
- Adjustable hand strap for left- or right-handed users



Fluke. Not just infrared, infrared you can use.®



Building problems, defects and general maintenance



Energy audit, building inspection, weatherization



Restoration, water damage, roofing



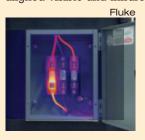
Patented Fluke IR-Fusion® Technology

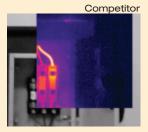
More than picture in picture

Infrared images alone can be difficult to understand, which is why Fluke pioneered IR-Fusion, a revolutionary marriage of visible and infrared images never before seen in commercial or industrial thermal imagers. Automatically capturing a visible image with every infrared image allows to you always know exactly what you're looking at.

Not all fusion is created equal

Don't be fooled by imitators. No other manufacturer can boast on-camera blending. Compare the images. Only Fluke has mastered the ability to create the industry's only transparent, perfectly blended and aligned visible and infrared images.







Detailed specifications

Temperature measurement range [not calibrated below = 10 °C] Temperature measurement and performent in the performent of the performent o		TiR1	TiR	
Include Below = 10°C) Table 150°C 4°T to 1-30°C 4°T to	Temperature			
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seconds voice annotations, or 3000 basic bitmap (.bmp) images transferrable to PC via included multi-format USB card reader		One-handed image capture, review, and save capability		
File formats Non-radiometric (.bmp) or fully-radiometric (.is2)	Storage medium			
	File formats	, ,, ,		
No analysis software required for non-radiometic bitmap (.bmp) files		No analysis software required for non-radiometic bitmap (.bmp) files		
Export file formats w/SmartView® software BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF		BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF		
Memory review Sequential image navigation and review	Memory review	Sequential image navigation and review		



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) without batteries	
Relative humidity	10 % to 95 % non-condensing	
Display	9.1 cm (3.7 in) diagonal landscape color VGA (640 x 480) LCD with backlight and clear protective cover	
Controls and adjustments	User selectable temperature scale (°C/°F)	
	Language selection Time/Date set	
	Emissivity selection (TiR1 only)	
	Reflected background temperature compensation (TiR1 only)	
	User selectable hot spot and cold spot, and center point on the image, (TiR1 only) (other custom markers and shapes in SmartView®	
	software)	
	User selectable backlight: "Full Bright" or "Auto"	
Software	SmartView® full analysis and reporting software included	
Batteries	Internal rechargeable battery pack (included)	
Battery life	Three to four hours continuous use (assumes 50 % brightness of LCD)	
Battery charge time	2.5 hours to full charge	
AC battery charging	AC adapter/charger (110 V ac to 220 V ac, 50/60 Hz) (included), charges battery while imager is operating or turned off, ac mains adapters included.	
AC operation	AC operation with included power supply (110 V ac to 220 V ac, 50/60 Hz). AC mains adapters included.	
Power saving	Sleep mode activated after five minutes of inactivity, automatic power off after 30 minutes of inactivity	
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	Meets all applicable requirements in EN61326-1:2006	
C Tick	IEC/EN 61326-1	
US FCC	CFR 47, Part 15 Class B	
Vibration	0.03 g2/Hz (3.8 grms), IEC 68-2-6	
Shock	25 g, IEC 68-2-29	
Drop	2 meter (6.5 feet)	
Size (H x W x L)	26.7 cm x 12.7 cm x 15.2 cm (10.5 in x 5.0 in x 6.0 in)	
Weight (battery included)	1.2 kg (2.6 lb)	
Enclosure rating	IP54 (protected against dust, limited ingress; protection against water spray from all directions)	
Warranty	Two-years (standard)	
Recommended calibration cycle	Two-years (assumes normal operation and normal wear)	
Supported Languages	Czech, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish	

Ordering information

FLK-TiR1 9Hz Thermal Imager FLK-TiR 9Hz Thermal Imager Included

Thermal imager; ac power supply/battery charger (including mains adapters); SD memory card; multi-format USD memory card reader for downloading images into your computer; SmartView® software with free software upgrades for life; rugged, hard carrying case; soft transport bag; adjustable hand strap; printed users manual; warranty registration card.

Optional accessories

TI-CAR-CHARGER Thermal Imager Vehicle Charger
TI-VISOR Thermal Imager Visor

BOOK-ITP Introduction to Thermography Principles Book

TI-TRIPOD Tripod Mounting Base Accessory



Fluke. Not just infrared.
Infrared you can use.™

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