

Fluke TiR 9Hz Thermal Imager

Fluke TiR IR Infrared Thermal Imager W/ IR-Fusion and SmartView



Optimized for building envelope, restoration and remediation, inspection and roofing applications.

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

IR-Fusion Technology

See things both ways—infrared and visual (visible light) images fused together communicating critical information faster and easier—traditional infrared images are no longer enough. IR-Fusion, a patent-pending technology that simultaneously captures a digital photo in addition to the infrared image and fuses it together taking the mystery out of IR image analysis. **IR-Fusion is standard on TiR models.**

Fluke TiR Building Envelope Thermal Imager / Imaging Camera Specifications:

- Includes 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 (3.6 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
- Manufactured in the U.S.A.

Detailed specifications		
Temperature	Temperature measurement range (not calibrated below -10 °C)	-20 °C to +100 °C (-4 °F to +212 °F)
	Accuracy	± 5 °C or 5 % (whichever is greater)
	Measurement modes	Smooth auto-scaling and manual scaling
Imaging performance	Field of view	23° x 17°
	Spatial resolution (IFOV)	2.5 mRad
	Minimum focus distance	Thermal lens: 15 cm (6 in) Visible (visual) light lens: 46 cm (18 in)
	Focus	Manual
	Image frequency	9 Hz refresh rate
	Detector type	160 X 120 focal plane array, uncooled microbolometer
	Infrared lens type	20 mm F = 0.8 lens
	Thermal sensitivity (NETD)	≤ 0.1 °C at 30 °C (100 mK)
	Infrared spectral band	7.5 µm to 14 µm
	Visual camera	640 x 480 resolution
Image presentation	Palettes	Ironbow, blue-red, high contrast, grey
	Level and span	Smooth auto-scaling and manual scaling of level and span
	Minimum span (in manual mode)	2.5 °C (4.5 °F)
	Minimum span (in auto mode)	5 °C (9 °F)
	IR-Fusion information	Full Infrared or Picture-in-Picture

	<p>Picture-In-Picture (PIP) 100 % IR displayed in center 320 x 240 pixels</p> <p>Full screen (PIP off) 100 % IR displayed in center 640 x 480 LCD</p>
Image and data storage	<p>Storage medium SD memory card (2 GB memory card will store at least 1200 fully radiometric (.is2) IR and linked visual images each or 3000 basic (.bmp) IR images</p> <p>File formats Non-radiometric (.bmp) or fully-radiometric (.is2) No analysis software required for non-radiometric (.bmp) files</p> <p>Export file formats w/SmartView software JPEG, BMP, GIF, PNG, TIFF, WMF, EXIF, and EMF</p>
General specifications	
Temperature	<p>Operating: -10 °C to 50 °C (14 °F to 122 °F)</p> <p>Storage: -20 °C to +50 °C (-4 °F to 122 °F) without batteries</p>
Relative humidity	10 % to 90 % non-condensing
Display	9.1 cm (3.6 in) diagonal landscape color VGA (640 x 480) LCD with backlight (selectable bright or auto)
Controls and adjustments	<p>User selectable temperature scale (°C/°F)</p> <p>Language selection</p> <p>Time/date set</p>
Software	SmartView full analysis and reporting software included
Power	<p>Battery: Internal rechargeable battery pack (included)</p> <p>Battery life: 3 to 4 hours continuous use (assumes 50 % brightness of LCD)</p> <p>Battery charge time using ac adapter/charger or dc car charger: 2 hours for full charge</p>

AC operation/charging	AC adapter/charger (110 V ac to 220 V ac, 50 Hz to 60 Hz). Charges battery while imager is operating. Universal ac mains adapters included.
Power saving	Sleep mode activated after 5 minutes of inactivity, automatic power off after 30 minutes of inactivity
Safety standards	CE Directive: IEC/EN 61010-1 2nd Edition Pollution Degree 2
Electromagnetic compatibility	EMC directive: EN61326-1 C-Tick: IEC/EN 61326 US FCC: CFR 47, Part 15 Class A
Vibration	2 G, IEC 68-2-29
Shock	25 G, IEC 68-2-29 {2 m (6.5 ft) drop, 5 sides}
Dimensions (HxWxL)	0.27 m x 0.13 m x 0.15 m (10.5 in x 5 in x 6 in)
Weight	1.2 kg (2.65 lb)
IP rating	IP54
Warranty	Two-years
Calibration cycle	Two-years (assumes normal operation and normal aging)
Supported languages	English, Italian, German, Spanish, French, Russian, Portuguese, Swedish, Turkish, Czech, Polish, Finnish, Simplified Chinese, Traditional Chinese, Korean, and Japanese