

FLUKE®

Fluke TiS Building Diagnostic Thermal Imaging Scanner

Technical Data



Now you can afford thermal imaging! The quality that only Fluke can deliver at breakthrough affordability. TiS—the best thermal imager for the money.

Fluke proudly introduces an entry level thermal imager for quick, easy, and accurate problem identification and troubleshooting designed specifically for the building inspection professional.

Whether you are a building inspector, home inspector, electrician, energy auditor, HVAC, insulator, or windows installer the Fluke Thermal Imaging Scanner is the perfect tool to help you identify hidden building construction issues, find moisture intrusion, detect energy loss/missing insulation, and many basic electrical connection and load problems.

Now Fluke quality, durability, and performance are available in a thermal imager engineered for the value-conscious building professional.

The Fluke TiS Thermal Imaging Scanner is the top-performing imager in its price class and the most affordable thermal camera to meet the proposed RESNET infrared inspection standards.

Key features:

- The most affordable thermal imager on the market that meets the proposed RESNET infrared inspection standard
- Highest resolution (120x120) in price class
- Only imager in price class with versatile, one-handed, manual focus
- Largest display size 9.3 cm (3.7 in) in price class. 30 % larger than comparable imagers!
- Long battery life lasts ~4 hours
- Rugged body engineered to withstand 2 m (6.5 ft) drop test
- Award winning ergonomic design
- Easy to use—the TiS Thermal Imaging Scanner provides you with a basic, reliable solution for the building professional
- Trusted quality of Fluke brand



Building problems, defects and general maintenance



Energy audit, building inspection, weatherization



Restoration, water damage, roofing



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Detailed specifications

TIS	
Temperature	
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +100 °C (-4 °F to +212 °F)
Temperature measurement accuracy	± 5 °C or 5 % (at 25 °C nominal, whichever is greater)
Imaging performance	
Image capture frequency	9 Hz refresh rate
Detector type	120 X 120 Focal Plane Array, uncooled microbolometer
Thermal sensitivity (NETD)	≤ 0.1 °C at 30 °C target temp. (100 mK)
Infrared spectral band	7.5 µm to 14 µm (long wave)
Standard infrared lens type	Field of view: 17° x 17°
	Spatial resolution: (IFOV) 2.50 mRad
	Minimum focus distance: 15 cm (approx. 6 in)
Focus mechanism	Versatile, one-handed manual focus
Image presentation	
Palettes	Ironbow, Blue-Red, Grayscale
Level and span	Smooth auto-scaling and lock of level and span
Minimum span (in auto mode)	5 °C (9 °F)
Image capture, review, save mechanism	One-handed image capture, review, and save capability
Storage medium	SD Memory Card (2 GB memory card will store at least 1200 fully radiometric (.is2) IR images annotations, or 3000 basic bitmap (.bmp) images, transferrable to PC via included multi-format USB card reader
File formats	Non-radiometric (.bmp) or fully-radiometric (.is2)
	No analysis software required for non-radiometric bitmap (.bmp) files
Export file formats w/SmartView® software	BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF
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	9.3 cm (3.7 in)
Controls and adjustments	User selectable temperature scale (°C/°F)
	Language selection
	Time/Date set
	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 aging)
Supported Languages	Czech, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish, and (Dutch and Hungarian in manual only)



Key benefits of Fluke thermal imagers in building inspections:

- Expand your business offering with infrared inspections
- Differentiate your service from competition
- Find hidden problems
- Identify issues faster
- Identify areas for customers to reduce energy usage
- Document and validate your work
- Reduce liability
- Increase safety

Applications for building inspections

Residential:

- Air infiltration (energy usage/comfort)
- Missing, improperly installed or settled insulation
- Roof leak inspection
- Duct leaks
- HVAC testing
- In floor heating
- Dryer vents
- Residential electrical
- Moisture intrusion and condensation issues

Commercial:

- Roof leak inspection
- Commercial HVAC
- Moisture detection
- Steam traps
- Electrical inspections
- Electrical motors
- Pumps and hydraulics
- Commercial energy loss (building envelope inspection)
- Plumbing

Ordering information

FLK-TiS 9Hz Thermal Imaging Scanner

Included: TiS Thermal Imaging Scanner with standard infrared lens; ac power supply/battery charger (including mains adapters); SD memory card; multi-format USB 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; users manual on CD; warranty registration card; interactive training DVD.

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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