

# Fluke Ti25 and Ti10 Thermal Imagers

## Technical Data

### The ultimate tools for troubleshooting and maintenance

The perfect tools to add to your problem solving arsenal. Built for tough work environments, these high-performance, fully radiometric imagers are ideal for troubleshooting electrical installations, electro-mechanical equipment, process equipment, HVAC/R equipment and others.

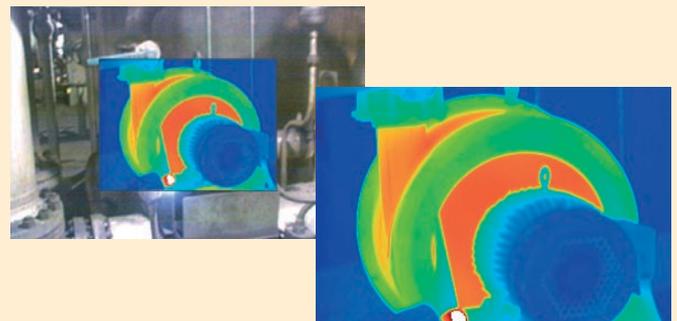
- All Fluke imagers come with enhanced problem detection and analysis capabilities with IR-Fusion® Technology. Simply scroll through the different viewing modes quickly to better identify trouble areas in Full IR thermal, picture-in-picture, or automatic blend visual and thermal images.
- Optimized for field use in harsh work environments.
- Engineered and tested to withstand a 2 m (6.5 ft) drop—When was the last time you dropped a tool?
- Withstands dust and water—tested to an IP54 rating.
- Delivers the clear, crisp images needed to find problems fast.
- Identify even small temperature differences that could indicate problems with excellent thermal sensitivity (NETD).
- Intuitive, three-button menu is easy to use—simply navigate with the push of a thumb.
- No need to carry pen and paper—record findings by speaking into the camera. Voice annotations can be recorded with every image you take. Voice comments are saved along with individual images for future reference (Ti25 only).
- Everything needed to get started is included.
- Adjustable hand strap for left- or right-handed use.
- Manufactured in the U.S.A.



### 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 Fluke Ti25 and Ti10 models.



## Detailed specifications

	<b>Ti25</b>	<b>Ti10</b>
<b>Temperature</b>		
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +350 °C (-4 °F to + 662 °F) (two ranges)	-20 °C to +250 °C (-4 °F to + 482 °F)
Accuracy	± 2 °C or 2 % (whichever is greater)	± 5 °C or 5 % (whichever is greater)
On-screen emissivity correction	Yes	—
<b>Imaging performance</b>		
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)	≤ 0.2 °C at 30 °C (200 mK)
Infrared spectral band	7.5 µm to 14 µm	
Visual camera	640 x 480 resolution	
<b>Image presentation</b>		
Palettes	Ironbow, blue-red, high contrast, amber, hot metal, grey	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)	5 °C (9 °F)
Minimum span (in auto mode)	5 °C (9 °F)	10 °C (18 °F)
IR-Fusion® information	Full infrared with MAX, MID, or MIN automatic blending; and picture-in-picture with MAX, MID, or MIN automatic blending (Visual and IR blending)	Full infrared or picture-in-picture
Picture-In-Picture (PIP)	Three levels of on-screen IR blending displayed in center 320 x 240 pixels	100 % IR displayed in center 320 x 240 pixels
Full screen (PIP off)	Three levels of on-screen IR blending displayed in center 640 x 480 LCD	100 % IR displayed in center 640 x 480 LCD
<b>Voice annotation</b>		
Voice annotation	60 seconds maximum recording time per image	—
<b>Image and data storage</b>		
Storage medium	SD memory card (2 GB memory card will store at least 1200 fully radiometric (.is2) IR and linked visual images each with 60 seconds voice annotations or 3000 basic (.bmp) IR images)	
File formats	Non-radiometric (.bmp) or fully-radiometric (.is2) No analysis software required for non-radiometric (.bmp) files	
Export file formats w/SmartView™ software	JPEG, BMP, GIF, PNG, TIFF, WMF, EXIF, and EMF	

## General specifications

<b>Temperature</b>	Operating: -10 °C to 50 °C (14 °F to 122 °F) Storage: -20 °C to +50 °C (-4 °F to 122 °F) without batteries
<b>Relative humidity</b>	10 % to 90 % non-condensing
<b>Display</b>	9.1 cm (3.6 in) diagonal landscape color VGA (640 x 480) LCD with backlight (selectable bright or auto)
<b>Controls and adjustments</b>	User selectable temperature scale (°C/°F) Language selection Time/Date set Emissivity selection (Ti25 only) User selectable Hot Spot and Cold Spot on the image (Ti25 only) Ti25 allows user to adjust palette, alpha blend, level, span, PIP, and emissivity on a captured image before it is stored.
<b>Software</b>	SmartView™ full analysis and reporting software included
<b>Power</b>	Battery: Internal rechargeable battery pack (included) Battery life: Three to four hours continuous use (assumes 50 % brightness of LCD) Battery charge time using ac adapter/charger and dc car charger: Two hours for full charge
<b>AC operation/charging</b>	AC adapter/charger (110 Vac to 220 Vac, 50 Hz to 60 Hz). Charges battery while imager is operating. Universal ac mains adapters included.
<b>Power saving</b>	Sleep mode activated after 5 minutes of inactivity, automatic power off after 20 minutes of inactivity
<b>Safety standards</b>	CE Directive: IEC/EN 61010-1 2nd Edition Pollution Degree 2
<b>Electromagnetic compatibility</b>	EMC directive: EN61326-1 C-Tick: IEC/EN 61326 US FCC: CFR 47, Part 15 Class A
<b>Vibration</b>	2 G, IEC 68-2-29
<b>Shock</b>	25 G, IEC 68-2-29 (2 m or 6.5 ft drop, 5 sides)
<b>Dimensions (HxWxD)</b>	0.27 m x 0.13 m x 0.15 m (10.5 in x 5 in x 6 in)
<b>Weight</b>	1.2 kg (2.65 lb)
<b>IP rating</b>	IP54
<b>Warranty</b>	Two-years
<b>Calibration cycle</b>	Two-years (assumes normal operation and normal aging)
<b>Supported languages</b>	English, Italian, German, Spanish, French, Russian, Portuguese, Swedish, Turkish, Czech, Polish, Finnish, Simplified Chinese, Traditional Chinese, Korean, and Japanese