

# Ti10/Ti25 Thermal Imagers





Fluke Ti10/Ti25





Complete package

#### **Included Accessories**

SmartView™ software 2 GB SD card SD card reader Rugged hard carrying case Soft carrying case Hand strap Rechargeable battery AC charger/power supply User manual

#### **Ordering Information**

Fluke Ti10 Thermal Imager Fluke Ti25 Thermal Imager

11341-eng Rev. 01

# The ultimate tools for troubleshooting and maintenance

The Fluke Ti10/Ti25 are the perfect tools to add to your problem solving arsenal. Built for tough work environments, these highperformance, fully radiometric imagers are ideal for troubleshooting electrical systems, electro-mechanical equipment, process equipment, HVAC/R equipment and others.

- Enhanced problem detection and analysis capabilities with patent-pending IR-Fusion\* Technology
- Optimized for field use in harsh work environments
- Engineered and tested to withstand a 2 meter drop
- Withstands dust and water tested to an IP54 rating
- Innovative protective lens cover protects the lens when not in use

- Delivers the clear, crisp images needed to find problems fast
  - Identify even small temperature differences that could indicate problems with excellent thermal sensitivity (NETD)
  - Even the smallest details become visible with the large, widescreen full color LCD display
- 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 – comments are saved with the image (Ti25 only)
- Store more than 3.000 screen images (.bmp format) or 1.200 IR-Fusion images on included 2 GB SD memory card

### Specifications

(Check the Fluke web for detailed specifications)

	Fluke Ti10	Fluke Ti25			
Thermal imaging performance					
Field of view (FOV)	23 ° horizontal x 17 ° vertical				
Spatial resolution (IFOV)	2.5 mrad				
Min focus distance	15 cm				
Thermal sensitivity (NETD)	≤0.2 °C at 30 °C	≤0.1 °C at 30 °C			
Minimum span (Auto/Manual)	10 °C / 5 °C	5 °C / 2.5 °C			
Focus	Manual				
Detector type	160 x 120 Focal Plane Array, uncooled microbolometer				
Visual imagng performance					
Min focus distance	46 cm				
On camera operating modes	Full Picture-in-Picture and full screen IR	Picture-in-Picture and full screen IR plus Blending			
Visible light camera	640 x 480 pixels, full color				
Temperature measurement					
Temperature range	-20 °C to 250 °C	-20 °C to 350 °C			
Accuracy	± 5 °C or 5%	± 2 °C or 2%			
Measurement modes	Center point	"Center point and hot and cold markers"			
On screen emissivity correction		•			
Image presentation					
Digital display	9.1 cm (3.6") landscape color VGA (640x480) LCD"				
LCD backlight	Selectable bright or auto				
Palettes	Ironbow, blue-red, high contrast, grey	Ironbow, blue-red, high contrast, amber, hot metal, grey			
Image and data storage					
Storage medium	2GB SD Card (3000 .bmp IR images/1200 .IS2 IR-Fusion images)				
File formats supported	JPEG, BMP, GIF, PNG, TIFF, WMF EXIF and EMF				
Voice memo recorder		•			
Controls and adjustments					
Set-up controls	Date/time, °C/°F, language	Date/time, C/F, language, emissivity, hot spot and cold spot on image			
Language selection	Eng, ger, fre, spa, por, ita, swe, fin, rus, cze, pol, tur				
Image controls	Smooth auto scaling and manual scaling				
On-screen Indicators	Battery status, real time clock and center point temperature, range and span indication and high and low alarm settings				

Battery life: 3 to 4 hours continuous operation Water and dust resistant: IP54 Size (HxWxD): 267 x 127 x 152 mm Weight: 1.2 kg Two Years Warranty

# **Recommended Accessories**





#### Find it, fix it, fast!

Temperature changes can indicate problems in many areas you see everyday, some include:

- Inside electrical distribution and service (Switch gear, panels, controls, fuses, transformers, receptacles, lighting, conductors, bus bars, motor control centers)
- . Motors, pumps and mechanical (Electric motors and generators, pumps, compressors, evaporators, bearings, couplings, gearboxes, gaskets/seals, belts, rollers, disconnects)
- Process (Tanks and vessels, pipes, valves and traps, reactors, process insulation)
- HVAC/R (air conditioning, heating, air handlers, refrigeration)
- Outside electrical distribution - utilities (Transformers, bushings, insulators, transmission lines, other exterior conductors, service connections, disconnects, capacitor banks)

# **IR-Fusion®** Technology: Infrared and visual images fused together in one image

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. Patent-pending IR-Fusion® Technology, only available from Fluke, simultaneously captures a digital photo and the infrared image and fuses them together taking the mystery out of IR image analysis.

Imaging enhanced with IR-fusion help identify and report suspect or faulty components enabling repairs to be done as well as prove that the problem was corrected

#### Multiple viewing modes

Identify problems quickly using different on-screen models - the user selects the mode that works best for each situation. While some viewing modes are not included in every model, all are available for viewing and analysis in the included free SmartView<sup>™</sup> software.



Overheating bearing cap





gear load imbalance

## FREE thermal imaging application DVD

This DVD covers the principles of thermal imaging and looks at using this powerful troubleshooting technology in electrical, electro-mechanical and process control applications. Order your copy at www.fluke.co.uk/DVD or www.fluke.eu/DVD.







**Picture-in-Picture** 



Alpha Blending



**IR/Visible Alarm** 



**Full Visible Light** 



#### Selection Table Industrial Applications

	Ti10	Ti25	<b>Ti20</b>	Ti40FT/Ti45FT	Ti50FT/Ti55FT
Detector type	160 x 120	160 x 120	128 x 96	160 x 120	320 x 240
IR-Fusion	•	•		•	•
Field of View (FOV)	23° x 17°	23° x 17°	20° x 15°	23° x 17°	23° x 17°
Optional lenses				•	•
180° articulating lens				•	•
Thermal sensitivity	≤ 0.2 °C	≤ 0.1 °C	≤ 0.2 °C	down to ≤ 0.08 °C	down to $\leq 0.05$ °C
Temperature range	250 °C	350 °C	350 °C	up to 600 °C*	up to 600 °C
Digital display	3.6" LCD	3.6" LCD	3" LCD	5" LCD	5" LCD
Video output				•	•
Choice of palettes	4	6	10	8	8
PdM routing function			•		
Voice annotation		•			
Software	SmartView	SmartView	InsideIR	SmartView	SmartView
Storage capacity	>3000 IR images	>3000 IR images	100 IR images	>1000 IR images	>1000 IR images

\*1200 °C option available