

INFRARED
INC.

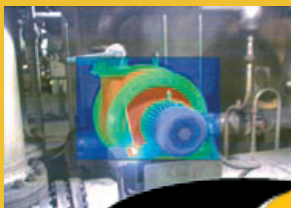
NEW! Fluke Ti25 and Ti10 Thermal Imagers

The ultimate tools
for troubleshooting
and maintenance

IR-Fusion® Technology—
infrared and visual images
fused together makes
infrared easy to understand

Rugged, reliable,
easy to use . . . what
you expect from Infrared, Inc.

Models for almost any
application and budget



The perfect thermal imagers for everyday troubleshooting

The Fluke Ti25 and Ti10 are 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 instrumentation, HVAC equipment and others.

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 or Automatic (auto) Blend visual and thermal images.

Optimized for field use in rough work environments.

- Engineered and tested to withstand a 2 meter (6.5 foot) drop—when was the last time you dropped a tool?

- Withstands dust and water—tested to an IP54 rating

- Innovative protective lens cover protects the lens when not in use. The cover is securely attached and out of the way while images are being taken.

- Works in ambient temperatures as low as -10 °C (14 °F) and high as +50 °C (122 °F), and the Ti25 measures up to 350 °C (662 °F)

Delivers the clear, crisp images needed to find problems fast

- Identify even small temperature differences that could indicate problems with excellent thermal sensitivity (NETD)

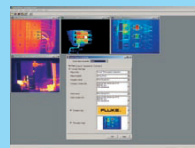
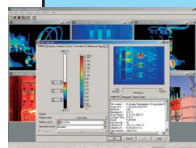
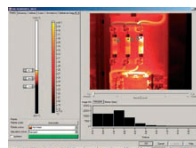
High performance, low noise sensor provides high quality image and stable temperature reading

- Even the smallest details become visible with the large, widescreen full VGA 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. Voice annotations can be recorded with every image you take. Voice comments are saved along with individual images for future reference (Ti25 only)

Store more than 3,000 screen images (bmp format) for easy reporting direct into Microsoft Word® and other programs or 1,200 IR-Fusion images, including thermal image, visual image, temperature data and voice recorded comments for reporting and analysis purpose. Data is stored on included 2 GB SD memory card.



Infrared, Inc./Fluke SmartView™ software is included with each Fluke thermal imager.

- Powerful, modular suite of software tools for viewing, annotating, editing and analyzing of infrared images.
- Generate customizable, professional-looking reports in a few easy steps.
- Full support of IR-Fusion Technology lets you edit images in five viewing modes

SmartView™ software system requirements

- Windows® 2000 SP4 with update rollup 1/XP SP2/ Vista
- A web browser for product registration. Internet Explorer 5.0 or newer or Netscape® 5.0 or newer
- 500MB available disk space, not counting space requirements for web browser
- 16-bit color, 800x600 resolution on video or better
- Color printer for printing the images
- CD-ROM drive (for installing SmartView software)

Thermal imaging terminology explained



Palette—Color representation of the temperatures (temperature scale) in a displayed image. Certain color palettes meet personal preferences or optimize the image for different applications and/or problems. An example of the different palettes appear to the right.

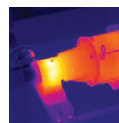
Sensor Size—Similar to digital cameras the sensor size describes the amount of displayed points per image of a thermal imager. A sensor size of 160 x 120 captures and displays more than 19,000 measurement points with each measurement. This is more than sufficient for almost all industrial and electrical applications. If the imager is fully radiometric then it also truly measures and stores all captured points with the image.

Field of view (FOV)—Indicates what the thermal imager sees or measures at a given moment. The combination of the Field of View specification and the distance to the measured object determines which surface or part of an object will be measured as a total. A thermal imager with a FOV of 23° x 17° (20 m), F=0.8 lens) can detect an object that is 6 m (20 ft) wide by 4.5 m (15 ft) high. This same imager can infer a temperature measurement of a smaller section on within that object of 3.8 cm x 3.8 cm (1.5 in x 1.5 in). A FOV calculator on www.fluke.com/FOV helps you calculate the measurement surface at various distances to the object.

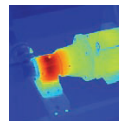
Thermal sensitivity—Indicates what the smallest temperature difference is which can be measured/displayed in an image. It basically is the maximum resolution of the image and is referred to as NETD (noise equivalent temperature difference). A NETD of 200 mK is more than adequate for most industrial and electrical applications.

Emissivity adjustment—All surfaces emit infrared energy or heat. The level of emission varies much per surface and is described with the term emissivity. Painted coatings and materials usually have a high emissivity while polished aluminum has a low emissivity. Visit www.fluke.com/emissivity for a table with emissivities for different materials. If you perform qualitative inspections with the imager (most applications) then emissivity does not have to be adjusted. To measure the temperature of a material accurately it will be necessary to adjust for the material's emissivity in specific applications.

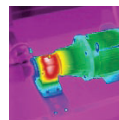
Span—The set of temperature values that can be measured within a preset range. Adjusting the span allows you to see more subtle temperature gradients (or contrast) in a captured image. When the span is optimized the imager shows 256 different shades of color in an image.



Ironbow



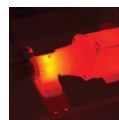
Blue-red



High contrast



Amber



Hot metal



Gray

Specifications:

	Fluke Ti25	Fluke Ti10
Imaging performance		
Thermal Field of View (FOV)	23° horizontal x 17° vertical	
Minimum focus distance	Thermal lens: 15 cm (approx. 6 in), Visible (visual) light lens: 46 cm (approx. 18 in)	
Thermal Sensitivity (NETD)	0.1 °C at 30 °C (100 mK)	0.2 °C at 30 °C (200 mK)
Minimum span (Auto/Manual)	5 °C/2.5 °C	10 °C/5 °C
Focus	Manual	
Detector Size	160 x 120	
Visual: On Camera operating modes	Picture-in-Picture (Blending is user selectable between MAX, MID and MIN) and full screen IR (Blending is user selectable between MAX, MID and MIN)	Full picture-in-picture and full screen IR
Visual (Visible light) camera	640 x 480 pixels, full color	
Temperature measurement		
Temperature range	-20 °C to +350 °C (-4 °F to +662 °F), 2 ranges	-20 °C to +250 °C (-4 °F to +482 °F)
Accuracy	± 2 °C or 2 % (whichever is greater)	
Measurement modes	Center point hot and cold markers	Center point
On-screen emissivity correct on	Yes	No
Image presentation		
Digital display	9.1 cm (3.6 in) diagonal landscape color VGA (640 x 480) LCD	
LCD backlight	Selectable bright or auto	
Palettes	ironbow, blue-red, high contrast, amber, hot metal, grey	ironbow, blue-red, high contrast, grey
Image and data storage		
Fully radiometric	Yes	
Storage medium	2 GB SD card stores up to 3000 .bmp IR images or 1200 .IS2 IR-Fusion images	
File format supported	Exportable to JPEG, BMP, GIF, PNG, TIFF, WMF EXIF, and EMF	
Voice memo recorder (Voice annotation)	Yes	No
Software	Smart view, full analysis and reporting software included	
Controls and adjustments		
Set-up controls	Date/time, °C/°F, language, emissivity, hot spot and cold spot on image	Date/t/m/e, °C/°F, language
Language select on	English, German, French, Spanish, Portuguese, Italian, Swedish, Finnish, Russian, Czech, Polish, Turkish, Simplified Chinese, Traditional Chinese, Korean, Japanese	
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	
Power		
Battery type	Internal rechargeable battery (included)	
Battery operating time	3 to 4 hours continuous operation	
Battery charging	2 hours with AC charger or DC car charger (charges battery while operating)	
AC operation	AC adapter charger, 110/230 V ac, 50/60 Hz	
Power saving	Automatic shutdown and sleep mode (user specified)	
Environmental and mechanical design		
Operating temperature	-10 °C to +50 °C (+14 °F to +122 °F)	
Storage temperature	-20 °C to +50 °C (-4 °F to +122 °F)	
Relative Humidity	Operating and storage 10% to 90%, non-condensing	
Water and dust resistant	IP54	
2 meter (6.5 feet) drop test	Yes	
Protective lens cover	Yes	
Weight (including battery)	1.2 kg (2.6 lbs)	
Imager size (HxWxD)	267 mm x 127 mm x 152 mm (10.5 in x 5.0 in x 6.0 in)	
Other		
Warranty	Two-years	
EN 61010-1 2nd edit on & ENG	Yes	



Keeping your world up and running



Fluke 435 Three-Phase Power Quality Analyser

Infrared, Inc. offers a wide range of electronic, electrical and power quality troubleshooting tools for the industry. With our long experience in delivering top quality, easy-to-use and safe tools, we understand your job and the challenges you face day in-day out. These tools are designed to improve your ability to do a better job by offering rugged, reliable and innovative instruments.



Everything you need to get started is included:

- SmartView™ analysis and reporting software (with free upgrades through life of product)
- 2 GB SD Memory Card
- SD Card Reader for downloading images into your computer
- Rugged hard carry case and portable soft carry case
- Hand strap adjustable for left or right handed user
- Internal rechargeable battery
- AC charger/power supply



Fluke 289 True-rms Industrial Logging Multimeter with TrendCapture



Check out the interactive Thermal Imager Selection Tool

Enter your application requirements and the selection tool will match the best imagers to your application.

Go to www.infrared.com



Fluke 1587 Insulation Multimeter



Fluke 337 True-rms Clamp Meter



Fluke 771 Milliamp Process Clamp Meter

To find out more about Infrared, Inc. Thermal Imagers go to
www.infrared.com
or call (800) 888-2440

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