



# BLACK & ASSOCIATES

ELECTRICAL/ELECTRONIC TESTING  
& MEASURING EQUIPMENT



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## Fluke Industrial Thermal Imagers

# FLUKE.

Models: TI32, TI29 and TI27. Three models specifically for industrial and electrical applications.

### Technical Data

# P3 Series

**Proven  
Practical  
Performance**

## The P3 Series: Superior, not Superfluous. Fluke is how other tools are measured.



**TI27**  
• 240x180 IR resolution  
• 43,200 total IR pixels

**TI29**  
• 280x210 IR resolution  
• 58,800 total IR pixels

**TI32**  
• 320x240 IR resolution  
• 76,800 total IR pixels

The greatest technological advancement in thermography may be how Fluke has made it so simple to capture images and analyze data right out of the box.

#### Superior image quality

Industry-leading thermal sensitivity and spatial resolution combined with a high definition display, creates the sharpest images in the industry.

#### One-handed, easy-to-use interface

With just a push of your thumb, go from one-handed manual smart focus to adding picture-in-picture and even add voice comments.

#### Torture tested™

Before a Fluke goes into your hands, we drop it from ours. Only Fluke thermal imagers are designed from the inside out to withstand a 6.5 ft drop.

#### Patented Fluke IR-Fusion®

(Picture-in-picture and auto blending)  
Precision visible and IR image alignment allows Fluke to offer the only on-camera blended infrared and visible image to better diagnose issues.

#### Interchangeable lenses

Interchangeable wide-angle and IR-Fusion compatible telephoto lenses to cover any application.

*Fluke. Not just infrared, infrared you can use.®*



Industrial  
Mechanical,  
electromechanical  
and general building  
maintenance.



Process  
Refractory insulation,  
tank and vessel levels,  
steam systems and traps,  
pipes and valves, etc.



Electrical  
Unbalanced loads,  
overloaded systems,  
wiring mistakes or  
component failure, etc.



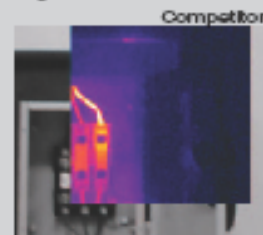
### Patented Fluke IR-Fusion® Technology

#### More than picture in picture

Infrared images alone can be difficult to understand, which is why Fluke pioneered IR-Fusion, a revolutionary marriage of visible and infrared images never before seen in commercial or industrial thermal imagers. Automatically capturing a visible image with every infrared image allows you to always know exactly what you're looking at.

#### Not all fusion is created equal

Don't be fooled by imitators. No other manufacturer can boast on-camera blending. Compare the images. Only Fluke has mastered the ability to create the industry's only transparent, perfectly blended and aligned visible and infrared images.





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Thermal Imager	TI-32	TI-29	TI-27
Temp. Range	-20C – 600°C (1112°F)		
Resolution	320 x 240 (76,800)	280 x 210 (58,800)	240 x 180 (43,200)
Sensitivity NETD	≤0.045°C (45 mK)	≤0.05°C (50 mK)	≤0.05°C (50 mK)
Frame Refresh Rate	60 Hz		
Software	Complete Reporting/Analysis Software Included FREE No Licenses		
Display	3.7 inch Landscape (640 X 480) LCD with Backlight & Clear Protective Cover		
Voice Recording	Yes – 60 Seconds per image (playback available on imager)		
Batteries	Two Lithium Ion rechargeable Smart Battery (5 LED battery meter)		
Battery Life	4+ Hours Continuous Use @ 50% Backlight / 2.5 hr charge (2 Bays)		
Drop Test Durability	YES – 6.5 ft drop tested (2 Meter) with standard lens		
Warranty	2 Years Standard (Optional Extended Warranty Plans Available)		
Emissivity Correction	YES		
Background Correction	YES		
Transmission Correction	YES		
Spectral Sensitivity	7.5 – 14 μm (Complete Long Wave Spectrum)		
Visible Camera Resolution	2.0 MP (Industrial Durable Performance) 18 inch min Focus		
Standard IR Lens			
Field of View	23° x 17°		
Spatial Resolution (IFOV)	1.25 mRad	1.43 mRad	1.67 mRad
Min Focus Distance	6 inches (15 cm)		
Telephoto Lens			
Field of View	11.5° x 8.7°		
Spatial Resolution	0.63 mRad	0.72 mRad	0.84 mRad
Min Focus Distance	18 inches (45 cm)		
Wide Angle Lens			
Field of View	46° x 34°		
Spatial Resolution	2.50 mRad	2.86 mRad	3.34 mRad
Focus	Manual – one handed Smart Focus capability		
Palettes	Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted		
Ultra-Contrast Palettes	Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra		
Level & Span	Smooth Auto Scaling & Manual Scaling of Level and Span		
Fast Toggle (Auto – Manual Span)	Yes		
Minimum Span Manual	2.5° C (4.5 °F)		
Minimum Span Auto	5 °C (9 °F)		
IR Fusion Blending	Yes, Automatically Aligned Parallax Corrected Visual & IR Images		
Picture in Picture (PIP)	Yes + Three Levels of IR Fusion Blending (MAX / MID / MIN)		
Color Temperature Alarm	Yes, High Temperature Alarm (User Selectable)		
Image Capture	One Handed Easy Trigger Capture – 2 GB SD Memory Card (1200 + Voice)		



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<b>File Formats</b>	.is2, .jpg, .bmp
<b>Memory Review</b>	Thumbnail view navigation and review selection
<b>Operating Temperature</b>	-10 – 50°C (14-122°F)
<b>Storage Temperature</b>	-20 – 50°C (-4-122°F) without batteries
<b>Relative Humidity</b>	10 – 95 % non-condensing
<b>AC Operation</b>	YES
<b>Power Saving Mode</b>	YES–Sleep Mode Activated after 5 min of inactivity, Power off after 30 min
<b>Recommended Calibration</b>	2 Years (assumes normal operation and aging)
<b>Enclosure Rating</b>	IP54
<b>Size</b>	10.9 in x 4.8 in x 6.7 in
<b>Weight with Battery</b>	2.3 lb / 1.05 kg

### Optional Accessories

<b>Telephoto Lens</b>
<b>Wide Angle Lens</b>
<b>Car Charger</b>
<b>Sun Visor</b>
<b>Tripod Mount</b>
<b>Care Plans (Details Below)</b>

#### Gold CarePlan

- Loaner camera on extended repair
- One year extended warranty coverage beyond your original factory warranty
- One NIST traceable calibration included during your extended warranty period
- Nist traceable calibration performed on needed repair incident
- 15% off standard service rates for out-of-plan service charges such as accidental physical damage or abuse
- First-on-Bench priority handling
- 20% discount on any requested performance check or NIST traceable calibration during your factory warranty period and CarePlan term.
- Renew your policy annually for up to three years (with uninterrupted coverage)
- Free firmware and hardware upgrade when available (product change notices, PCN)
- Notification service of calibration due date, pending plan expiration date and update notices

#### Silver CarePlan

- One year extended warranty coverage beyond your original factory warranty
- One performance check included during your extended warranty period
- Full performance check with any needed repair
- First-on-bench priority handling
- Discount on any requested performance check or NIST traceable calibration during your factory warranty period and CarePlan term.
- Renew your policy annually for up to two years (with uninterrupted coverage)
- Free firmware and hardware updates when available (product change notices, PCN)
- Notification service of calibration due date, pending plan expiration date and update notices



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## *Bronze CarePlan*

- One year extended warranty coverage beyond your original factory warranty
- Performance check on needed repair
- First-on-Bench priority handling
- Discount on any requested performance check or NIST traceable calibration during your factory warranty period and CarePlan term
- Free firmware and hardware updates when available (product change notices, PCN)
- Notification service of calibration due date, pending plan expiration date and update notices