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**P3**  
Series

Proven  
Practical  
Performance

**FLUKE®**

**Thermal Imagers**

Six amazing models. One trusted name.

# The Fluke P<sup>3</sup> Series

For Industrial & Electrical  
For Building Diagnostics



P<sup>3</sup>  
Series

Proven  
Practical  
Performance

The only thing that precedes Fluke's high standards of quality is our reputation for making the finest measurement tools in the world. Fluke thermal imagers are no exception. And, the P<sup>3</sup> Series handily delivers on the promise to offer the most tool for the money.



# Nothing Feels Like a Fluke

It not only fits your hand, it fits your idea of how a great tool should feel: intuitively comfortable, strong and solid, heavy duty, so it works long hours over many years.

# The P<sup>3</sup> Series—Superior, not Superfluous

Fluke is how other tools are measured.

## 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 comments in your own voice.

## 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' drop.





### 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.

## It isn't advanced if it isn't Easy to Use

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.

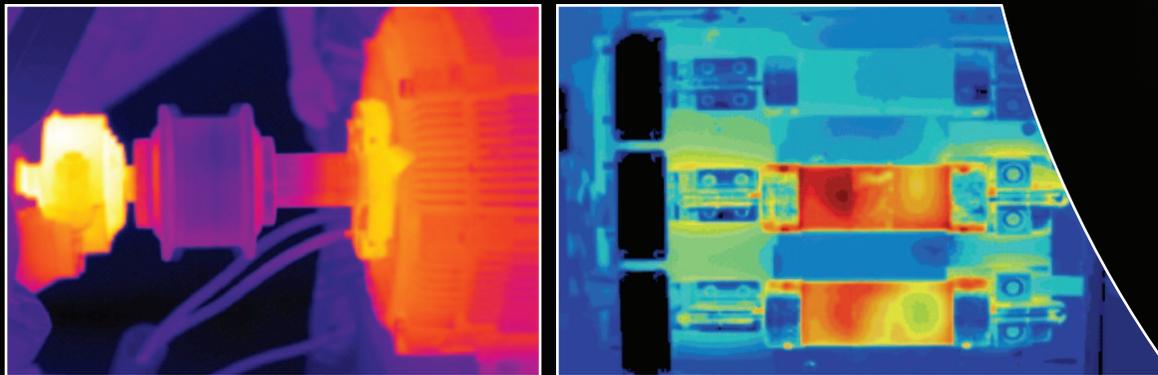
### Interchangeable lenses

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

# Fluke set the standard for Superior Image Quality

Trust your eyes. That's where you see the difference between the quality of Fluke resolution versus our competitors'. The easier it is to see the problem, the easier it is to provide solutions. Fluke starts with a large 3.7" display (640x480 resolution) with full VGA color and LCD display.

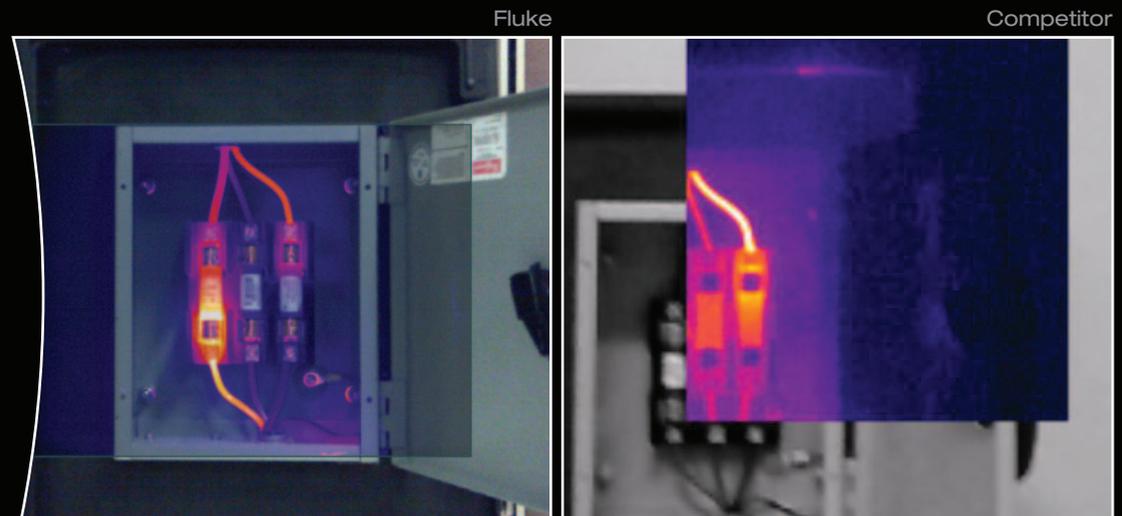
Even the smallest temperature difference can indicate a big problem, or at least the start of one. Fluke integrates the P<sup>3</sup> Series with industry-leading thermal sensitivity and spatial resolution to create the sharpest images in the industry.



P3  
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# A passion for precision Creates Fluke IR-Fusion®



No other manufacturer can boast on-camera blending. Compare the images above. Only Fluke has mastered the ability to create the industry's only transparent, perfectly blended and aligned visible and infrared images.



A close-up photograph of a Fluke Ti32 thermal imager. The device is primarily orange and black. The lens is a prominent feature in the center, surrounded by a grey protective ring. To the left of the lens, there is a black label with the Fluke logo and the model name 'Ti32' in large letters, with 'IR FUSION TECHNOLOGY' written below it. The handle is black and has a green trigger button. The background is dark, making the device stand out.

FLUKE  
Ti32  
IR FUSION  
TECHNOLOGY

## Legendary Ruggedness

makes Fluke  
hard to beat.

No matter how sophisticated the technology, Fluke has never forgotten that they make tools—thermal imagers that do amazing things, like winning Plant Engineering Product of the Year. But at the heart of every model, what Fluke makes is a super-rugged, hard-working, dependable tool.

The Fluke P<sup>3</sup> Series of thermal imagers are sophisticated computers and high-resolution cameras, but that doesn't mean they have to be coddled. All Fluke thermal imagers are built to take punishment, bridging the gap between high-tech device and practical tool. This is one gutsy tool.



P3  
Series

Proven  
Practical  
Performance

## Not just tested, Torture Tested™

Before a Fluke goes into your hands, we drop it from ours.  
Only Fluke thermal imagers are built to withstand a 6.5' drop.  
Fluke conducts **8 tests** before a thermal imager earns the name Fluke.

- 1** Drop packaged product on each face, corner, and edge (8 corners, 6 sides, 12 edges) from approximately one meter onto a steel base.
- 2** Drop the unpackaged unit from 2 meters; 6 drops on each face of the unpackaged unit.
- 3** Subject the unit to extensive vibration for 30 minutes, (10 Hz-500 Hz, at 0.03 g<sup>2</sup>/Hz – equivalent to ~ 4.8 g rms) on three perpendicular axes.
- 4** Bombard the unit with electromagnetic fields and radio frequency emissions per EN61326-1:2006 to see if the readings change.
- 5** Spray the unit with water at 10 liters/minute with a pressure of 100 kN/m<sup>2</sup> and also test sealed joints from dust ingress.
- 6** Run the product at temperatures down to -10 °C and up to 50 °C and verify that the product operates within specifications.
- 7** Run the product and add humidity, up to 95 % at up to 40 °C, and run the tests again.
- 8** Simulate sending the unit 12,000 meters (7 miles) in altitude and verify that the product still functions properly.

Fluke P<sup>3</sup> for  
Industrial &  
Electrical



**“If given a choice, I don’t know any engineer who wouldn’t rather own Fluke.”**

# The first solution Is Finding the Problem



Industrial

Industrial, mechanical, electro-mechanical and general building maintenance.



Process

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



Electrical

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

Finding a potential problem before it becomes a costly disaster shows you just how much a Fluke thermal imager can save you in time, money and even lives. From a safe distance, you can quickly and accurately scan a large area for temperature differences, whether the objects are moving, out-of-reach, too hot or too risky to be near.

Whether you're checking for bad steam traps, load imbalances or overheating bearings, Fluke P<sup>3</sup> Series of thermal imagers keep the promise of performance. Dependability is the benchmark by which all tools should be measured. That's why, for more than 60 years, experienced industrial and electrical professionals have turned to Fluke to do the job that needs doing.

## 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

# For building diagnostics, it's not a question of why anymore. It's a Question of When



Green Energy

Energy audit, building inspection and weatherization.



Moisture Detection

Restoration, water damage and roofing.



Building Diagnostics

Building problems, defects and general maintenance.

The more aware your customers become of thermography, the more they'll demand it. Whether you're searching for energy waste, leaky roofs or moisture problems, Fluke P<sup>3</sup> Series thermal imagers offer tested and proven game-changing technology that takes the guesswork out of finding problems and provides solutions.

The highest resolution. The greatest durability. The easiest to use. Advantage Fluke. Advantage you.

## Fluke P<sup>3</sup> Series and the art of persuasion.

Telling someone they have a problem is not nearly as convincing as proving your point with a colorful, high-resolution thermal image. To make things even clearer, our pioneering IR-Fusion<sup>®</sup> lets you show both infrared and normal light images in the same picture, so you have a frame of reference that should convince even the most skeptical customers.

### TiR27



- 240x180 IR resolution
- 43,200 total IR pixels

### TiR29



- 280x210 IR resolution
- 58,800 total IR pixels

### TiR32



- 320x240 IR resolution
- 76,800 total IR pixels



Fluke P<sup>3</sup> for  
Building  
Diagnostics

**“It’s building a new level of trust with my customers while it’s building my bottom line.”**

# After More Than 60 Years, giving you more than your money's worth is still a fresh idea.

The axiom what you see is what you get is meant to reveal honesty, but too often, it's what you don't see that could cost you later. Fluke's idea of value is making sure you get your money's worth and a little bit more. What others call "extras" and charge extra for, we make sure they're part of the Fluke package. That's why every Fluke comes with the most impressive set of standard features in the industry and is backed by the kind of service and support that's kept this company a leader for over six decades. With Fluke, what you see and what you get is quite honestly more.

	INDUSTRIAL MODELS			BUILDING DIAGNOSTICS MODELS		
	Ti27	Ti29	Ti32	TIR27	TIR29	TIR32
Detector Resolution	240x180	280x210	320x240	240x180	280x210	320x240
Total Pixels	43,200	58,800	76,800	43,200	58,800	76,800
Thermal Sensitivity (NETD)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.045 °C at 30 °C target temp (45 mK)	≤ 0.045 °C at 30 °C target temp (45 mK)	≤ 0.045 °C at 30 °C target temp (45 mK)	≤ 0.040 °C at 30 °C target temp (40 mK)
Optional Lenses	Telephoto & Wide angle					
Temp Measurement Range	-20 °C to 600 °C	-20 °C to 600 °C	-20 °C to 600 °C	-20 °C to 150 °C	-20 °C to 150 °C	-20 °C to 150 °C
Display Size	3.7" diagonal LCD					
Display Resolution	640x480	640x480	640x480	640x480	640x480	640x480
Accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)
Spatial Resolution (IFOV)	1.67 mRad	1.43 mRad	1.25 mRad	1.67 mRad	1.43 mRad	1.25 mRad
Focus Mechanism	Manual, one-handed Smartfocus					
Frame Rate	9 Hz or 60 Hz					
Color Palettes	16 (8 standard, 8 ultra-contrast)					
Temperature Alarms (Color/Audible)	Color Alarm (High temp)	Color Alarm (High temp)	Color Alarm (High temp)	Color Alarm (Low temp/Dewpoint)	Color Alarm (Low temp/Dewpoint)	Color Alarm (Low temp/Dewpoint)
Voice Annotation	Yes	Yes	Yes	Yes	Yes	Yes
IR-Fusion	FULL IR, PIP, and Auto Blending					
Battery (operating time)	2 L-ion replaceable (4+ hours each) rechargeable and field swappable	2 L-ion replaceable (4+ hours each) rechargeable and field swappable	2 L-ion replaceable (4+ hours each) rechargeable and field swappable	2 L-ion replaceable (4+ hours each) rechargeable and field swappable	2 L-ion replaceable (4+ hours each) rechargeable and field swappable	2 L-ion replaceable (4+ hours each) rechargeable and field swappable
Drop Test (ruggedness)	2 meter					
Standard Warranty	2 years					

Full specifications are available at:

Ti32, Ti29 and Ti27: [www.fluke.com/P3\\_Industrial](http://www.fluke.com/P3_Industrial)

TIR32, TIR29 and TIR27: [www.fluke.com/P3\\_Buildings](http://www.fluke.com/P3_Buildings)

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## Training from The Snell Group™

Training in thermography doesn't get any better than The Snell Group. Fluke makes it easy to advance your knowledge with books, online courses and personal support from Fluke's in-house team of experts. However, for advanced training and certification, Fluke has partnered with The Snell Group—undoubtedly, the most respected name in infrared education. Snell Group advanced training and certification is available online, in their classrooms or at your site.



### Training on your own schedule.

A comprehensive training video, as well as pre-recorded and live online webinars take you from the very basic information to more advanced use, focusing on a variety of topics. Visit [www.fluke.com/titraining](http://www.fluke.com/titraining) for all training options and schedules.

## Everything you need to get started and finish the job

- SmartView analysis and reporting software
- 2 GB SD memory card
- Multi-function memory card reader for downloading images
- Fluke signature hard and soft transport cases
- Adjustable hand strap (Left or right-handed users)
- 2 rechargeable batteries
- AC charger/power supply
- All Fluke thermal imagers come with a full two-year warranty. Extended warranties are also available.\*

\* Availability and specifications subject to change without notice.

## SmartView®

### The industry's most generous software package.

Compare Fluke's software to our competition's software and it's clear that Fluke doesn't leave you wanting. While others have been known to charge up to \$2,000 in additional software fees, Fluke's award-winning software package is standard.

### Free upgrades. Free to share.

Unlike other manufacturers, Fluke doesn't charge you for software upgrades. They're free for the life of the product. And, Fluke doesn't tie your hands with licensing agreements that keep you from sharing with others.

### SmartView is the smart choice.

- Extensive annotation, editing, and viewing options with full IR-Fusion capabilities, including 3D-IR™ analysis
- Multiple reporting options and templates
- Enhance and analyze images quickly and easily
- Easy access to editing functions with SmartView tools and controls
- Report Wizard guides you through automatic report generation
- Communicate image details with text annotation drag and drop feature
- Unlimited licenses and lifetime upgrades

## Performance-tested Fluke accessories

From telephoto and wide-angle lenses to extra chargers, tripod mounts and light-shading visors, you can expand your capabilities with Fluke signature accessories.



FLUKE THERMAL IMAGER

F1

F2

F3



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