FLUKE®



Fluke infrared tools

Built for the toughest industrial environments

TEMPERATURE MEASUREMENT SOLUTIONS

Built for the toughest industrial environments

Get the infrared cameras that are built on 65+ years of industrial experience. Each camera is built without compromise to the Fluke standard of ruggedness, reliability and accuracy. Designed for everyday use, in any environment for thorough and accurate inspections.

Choose from the affordable and versatile Performance Series, the Professional Series that offers superior image quality, or the Expert Series that gives you HD images on a large touchscreen.



Contents:

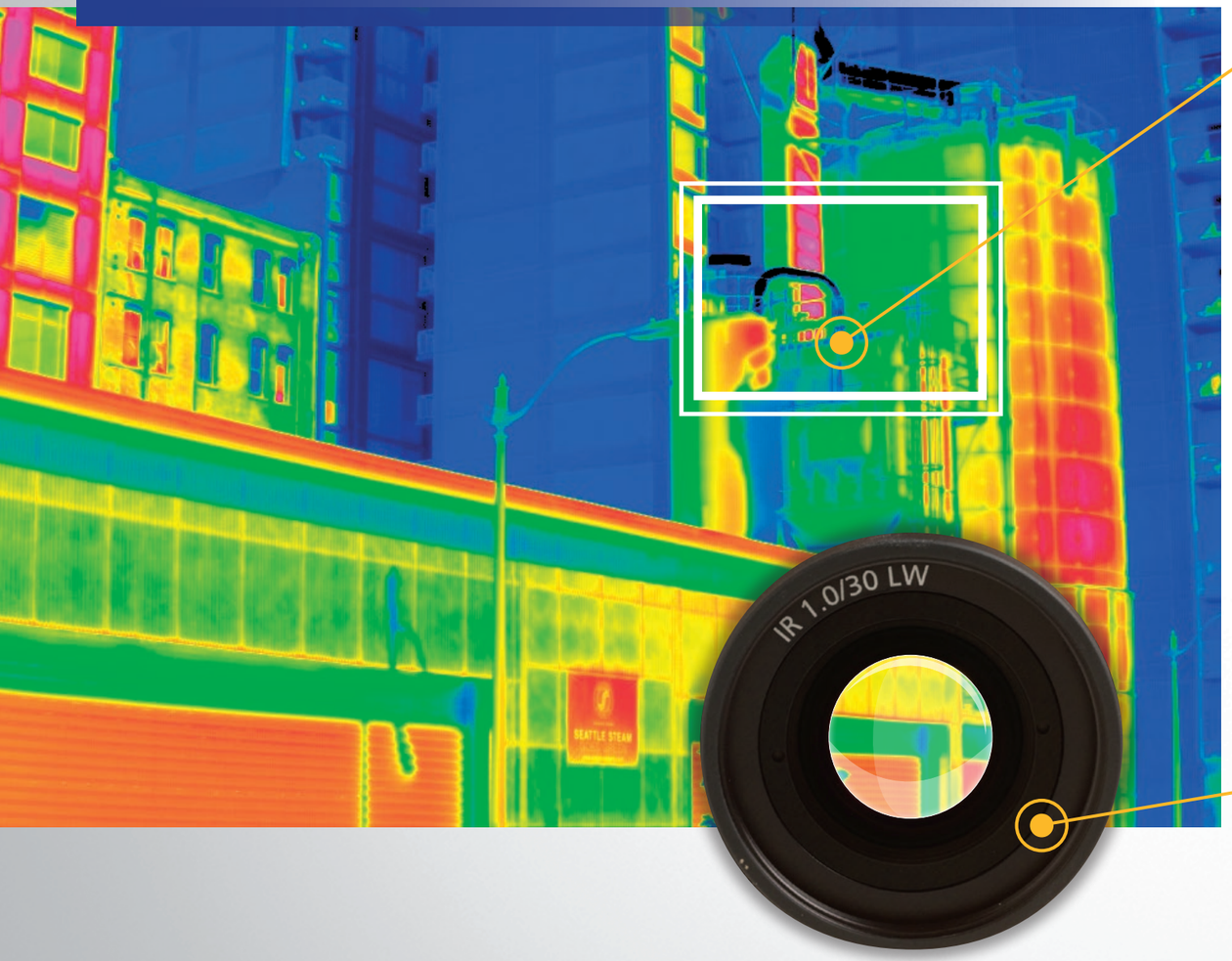
Image quality 4–5
Expert Series: TiX1000/620 6–7
Expert Series: TiX580/560/520/500 8–9
Professional Series: Ti480/450/400/300 10–11
Professional Series: Ti480 PRO/Ti450 PRO 12–13
Infrared Camera + Gas Detector: Ti450 SF6 14–15
Performance Series: TiS75/S65/S60/S55/S50/S45/S40/S20/S10 16–17
Analysis and reporting software: Fluke Connect® 18–20
Lenses 21
Thermal Multimeter: 279 FC 22
Visual IR thermometer: VT04/VT04A 23
IR thermometer: 572-2/568/62 MAX+ 24–25
IR windows 26
Accessories 27
Specifications 28–30

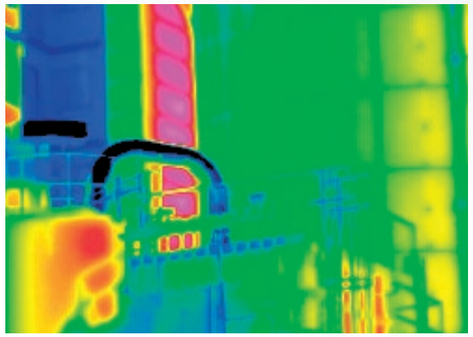
FLUKE®

Look beyond pixels. You'll SEE THE DIFFERENCE.

Pixels are only part of the equation that determines infrared image quality.

IMAGE QUALITY = focus + optics + FOV + pixels





Premier focus technologies.

Getting in-focus images can be painstaking with manual focus systems, and some autofocus systems may not focus on your desired target. Fluke Professional and Expert Series cameras include some of the most innovative focus technologies available.

- Capture a clear, accurate image focused throughout the field of view with MultiSharp™ Focus. Simply point and shoot—the camera automatically processes a stack of images focused near and far.
- Get an instant in-focus image of your designated target. LaserSharp® Auto Focus uses a built-in laser distance meter that calculates and displays the distance from your designated target with pinpoint accuracy—and immediately adjusts the focus.

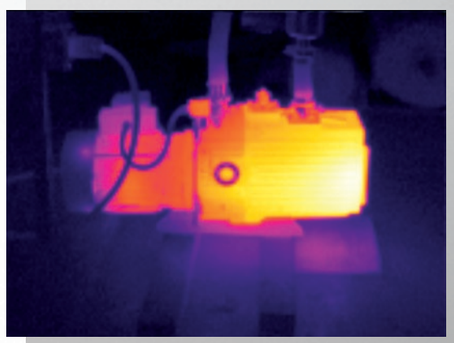


Simply the best optics.

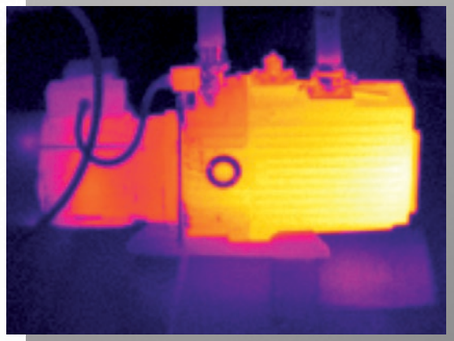
Fluke uses only 100 % diamond-turned germanium lenses covered with a specialty coating. This is the most efficient available material to transmit energy to the detector to produce high quality infrared images.

HOW FOV (FIELD OF VIEW) IMPACTS IMAGE QUALITY

We all know that detector resolution is imperative to image quality, but the level of detail that you can see in an image is also impacted by the field of view.



Resolution 160 x 120
FOV 31 ° x 22.5 °
D:S 295:1
Details in this image are a bit blurry due to the wider field of view that leads to a lower D:S.



Resolution 160 x 120
FOV 23 ° x 17 °
D:S 400:1
Same resolution, but the tighter field of view enables you to see more details in the target from the same distance.

Both images were taken with Fluke cameras at the same distance from the target.

The future of infrared is here in STUNNING HD resolution.

Your work as an expert thermographer is defined by the quality of the infrared images you take and your ability to analyze what's before you. The most pressing challenge lies not in analyzing what you see, but the fear of missing something you can't.



AN EXAMPLE OF WHERE TO USE THESE CAMERAS

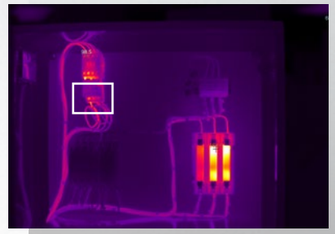
Perfect for a substation technician, distribution technician or utilities engineer in the transmission and distribution segments of utilities, who is looking for the best accuracy and image resolution. With high temperature options (up to 2000 °C / 3632 °F), these infrared cameras are perfect for inspecting transmission lines, switchgears, transformers, and insulators. They are great for checking conductor and insulator conditions, coolant oil levels in transformers and pinpointing very small hot spots.

FLUKE CONNECT®

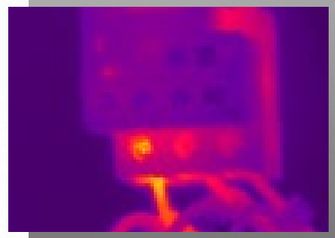
It's time to see what you're missing. Up to 3.1 million pixels with SuperResolution.

Instantly capture highly detailed images and start analyzing your images while still in the field. See incredible detail from a distance or extremely close up. On camera, you get up to 10x the pixels of a standard 320 x 240 camera (based on the TiX1000).

SuperResolution mode, available when viewed in software, lets you see HD resolution with up to 3.1 million pixels—4x the on-camera standard resolution.



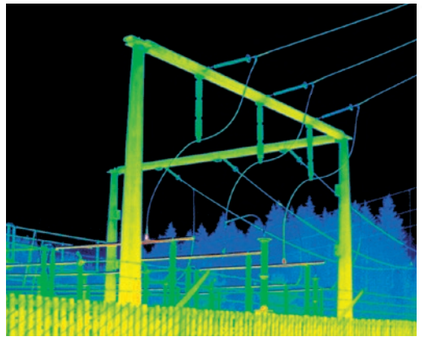
Full image, taken from 5 feet away with a TiX1000 infrared camera. The area shown in the white box is blown up below.



Regular resolution



Get 4x the pixels, and see incredible detail in your image with SuperResolution



The industry's most advanced focus options.

Precisely focus images by calculating the distance to your target with a laser distance meter, using LaserSharp® Auto Focus[1].

EverSharp multifocal recording gives you edge-to-edge clarity of targets both near and far in one image, which is created by capturing multiple images from varying focal distances.

TiX1000/620

- Capture tough shots with a large 5.6 inch rotating LCD display
- Optimized for outdoor inspections with viewfinder that reduces outdoor glare
- High temperature option up to 2000 °C[1]
- Capture spectacular images close up or from a distance with your choice of seven optional lenses including 2x telephoto, 4x telephoto, wide angle, super wide angle and 3 macro lenses[1]
- Identify rapid changes in temperature with the optional Subwindowing feature (up to 240 Hz)

[1]Features vary by model; see pages 28–30 for model specifications

TABLET-SIZED SCREEN. More details. Faster decisions.

You need maximum flexibility with an ergonomic design that allows you to easily navigate over, under and around hard-to-reach objects. With a lens that rotates a full 240 degrees and a tablet-sized 5.7 inch touchscreen LCD, you can aim and focus from a comfortable angle and easily capture the target that was once impossible to see.



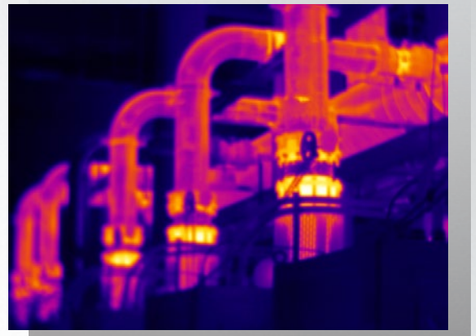
AN EXAMPLE OF WHERE TO USE THESE CAMERAS

Built for heavy industrial environments, a plant technician in oil & gas or chemical processing can use this tool for a number of different inspections. With the rotating lens, these cameras are an ideal form factor for large asset inspections, such as transformers, tanks, turbines or furnaces. The ergonomic design of these tools make them great for a long inspection day of detecting solid levels of tanks or inspecting conditions of refractories.

FLUKE CONNECT®

100 % Focused—Every object. Near and far.

Capture a clear, accurate image focused throughout the field of view with MultiSharp™ Focus. Be sure your images will be focused and high-quality when you go back to the office to view them, even when working outdoors with the possibility of glare on your screen. Simply point and shoot—the camera automatically processes a stack of images focused near and far.



Manual focus



MultiSharp™ Focus

MultiSharp™ Focus produces an image focused throughout the field of view



See around obstacles.

Easily maneuver over, under and around objects with the 240° rotating lens while viewing the screen at a comfortable angle.

TiX580/560/520/500

- See small details in the image and discover anomalies faster with up to 640 x 480 resolution images and the 5.7 inch tablet-sized touchscreen
- Edit and analyze images on camera—edit emissivity, enable color alarms and markers, and adjust IR-Fusion® visual and infrared image blending
- Get 4x the pixel data with SuperResolution, to create up to 1280 x 960 images[1]
- Find subtle temperature differences easily—instantly improve thermal sensitivity to as low as 30 mK[1]
- Monitor processes with video recording, live video streaming, remote control[1], or auto capture
- Integrate temperature data, images and video into R&D analysis and reports with MATLAB® and LabVIEW® Tool Boxes[1]
- Collaborate from the field in real time by wirelessly syncing images directly from your camera to the Fluke Connect® app on your smartphone, and optimize, analyze and generate reports with SmartView® desktop software[2]

[1]Features vary by model; see pages 28–30 for model specifications

[2]Within your provider's wireless service area; Fluke Connect® is not available in all countries

Autofocus redefined. ON TARGET AND IN FOCUS. Every. Single. Time.

You're it when it comes to getting the right answers—there's no room for fuzzy, out-of-focus infrared images. Potential problems hide behind incorrect readings, which is why you need a camera with LaserSharp® Auto Focus for crisp, sharp images.



AN EXAMPLE OF WHERE TO USE THESE CAMERAS

In your process manufacturing facility, multiple maintenance technicians and plant engineers can use this tool. Electrical technicians can look for heat signatures on electrical panels, mechanical technicians can inspect motors and reliability engineers can execute scheduled maintenance inspections. These cameras are critical for preventive maintenance programs, ideal for quick image capture and equipped with auto focus options for time-sensitive, more complex inspections.

FLUKE CONNECT®

Precisely focused images.

If your image is out of focus, temperature measurements could be off by up to 20 degrees or more. Getting crisp images in manual focus takes time and careful attention. Patented LaserSharp® Auto Focus with laser driven target detection gives you an in-focus image of your designated target with the push of a button. The built-in laser distance meter instantly calculates and displays the distance to your target, and the focus engine immediately adjusts the focus.



Navigate easier than ever.

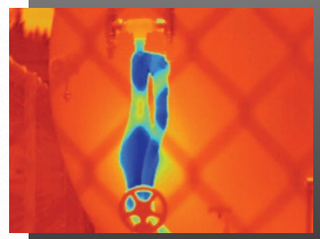
The Professional Series cameras have stunningly clear 3.5-inch, up to 640 x 480 high resolution responsive touch screens to easily spot problems, with intuitive controls to quickly navigate to the next image or switch modes. Plus, all camera features can be accessed one-handed—even with gloves—because of the large buttons.



Many inspection sites are challenging for certain autofocus systems.



Passive autofocus systems may only capture the near-field subject (fence).



Using a laser pointer with LaserSharp Auto Focus captures your target.

LaserSharp® Auto Focus gives you in-focus images with the push of a button.

Ti480/450/400/300

- Pistol grip form factor with up to 640 x 480 resolution for quick, point and shoot troubleshooting
- Capture clear, accurate images focused throughout the field of view with MultiSharp™ Focus[1]
- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create up to 1280 x 960 images[1]
- Digitally document critical information with your infrared image using IR-PhotoNotes™, voice annotation, or text annotation
- Monitor processes with video recording, live video streaming, remote control[1], or auto capture
- Collaborate from the field in real time by wirelessly syncing images directly from your camera to the Fluke Connect® app on your smartphone, and optimize, analyze and generate reports with SmartView® desktop software[2]

[1]Features vary by model; see pages 28–30 for model specifications

[2]Within your provider's wireless service area; Fluke Connect® is not available in all countries

Our bestselling cameras just got BETTER.

You deserve a leading-edge visual infrared experience. With our smartest, most intuitive user interface yet, the Ti480 PRO and Ti450 PRO offer increased thermal sensitivity to capture the smallest differences, the latest technology for on-screen clarity and lens compatibility to capture targets tiny-to-large.



FLUKE CONNECT®

AN EXAMPLE OF WHERE TO USE THESE CAMERAS

These cameras can be used for inspections by an entire maintenance staff. In your utilities generation facility, capture infrared images of boilers, compressors and refractories to inspect thermal variations. When accuracy, precision and image quality are critical, these cameras are the perfect additional to your tool belt.

Faster and easier to use than ever.

The Ti450 PRO and Ti480 PRO include an improved, user-tested, touch screen interface. The display integrates a contemporary design, featuring multiple rectangular markers in-camera. It helps your crew quickly identify min/max temperatures for an area of the equipment or equipment array.



Improved interface helps to quickly identify min/max temperatures.



Catch smaller temperature differences.

With the enhanced measurement accuracy and the wider dynamic temperature range of the Ti450 PRO and Ti480 PRO—up to 1500 °C with NETD as low as 25 mK— you can collect precise information for making informed decisions.



Screen comparison between Ti450 and Ti450 PRO. Diagnose problems faster with sharper onscreen infrared images with clearer color differentiation.

Ti450 PRO/Ti480 PRO

- Increased sensitivity to visualize temperature differences
- Easier to visualize and diagnose issues with sharper on-screen images, multiple rectangle markers and 9 color palettes
- More intuitive visual interface
- More flexibility to visualize targets–tiny to large with interchangeable smart lenses—no calibration required
- Capture a clear, accurate image focused throughout the field of view with MultiSharp™ Focus.
- Get an instant in-focus image of your designated target with LaserSharp® Auto Focus

Infrared for every day. SF6 gas detection when you need it.

Finally, a safe, easy and affordable way to catch SF6 leaks. Increase efficiency and save money with a top performing infrared camera that delivers pinpoint, state-of-the-art SF6 detection—conduct two critical functions with a single tool.



AN EXAMPLE OF WHERE TO USE THESE CAMERAS

In an outdoor electrical distribution station, this tool will perform efficient non-contact inspections of gas insulated switchgear to detect a potential SF6 gas leak, avoiding risk of electrocution. Perfect for use by a substation technician, journeyman electrician or lineman evaluating high voltage equipment that requires testing from a distance.

FLUKE CONNECT®

Designed for dependability.

Using the technology from Fluke's bestselling pistol grip camera, the Fluke Ti450 SF6 easily switches from infrared to gas mode with a turn of a dial, making it easy to change modes on the fly when you are in the field.





Safely investigate equipment using the included tripod mount and eyepiece



Two tools in one. At a one of a kind price.

Best of all, it's affordable enough to own, so you can conduct infrared and gas inspections whenever and wherever you want without having to pay heavy rental charges or hire expensive contractors.



Everything you need to detect an SF6 leak is included in the Ti450 SF6 case

Ti450 SF6

- Detects the location of an SF6 leak–without shutting down equipment
- 320 x 240 resolution for gas and infrared images; SuperResolution increases to 640 x 480, only in infrared mode
- Get in-focus images in both infrared and gas modes with a touch of a button with LaserSharp® Auto Focus
- Capture clear, accurate infrared images focused throughout the entire field of view with MultiSharp™ Focus
- Compatible with smart lenses that require no calibration when swapping them between cameras—2x telephoto lens included in kit
- Small and lightweight, fits easily into your tool box

Rugged. Accurate. BUILT TO PERFORM.

You need quick, accurate infrared imaging in a rugged body. Get up to 320 x 240 resolution, so you can easily identify small details that could indicate a big problem.



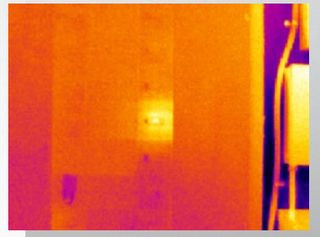
AN EXAMPLE OF WHERE TO USE THESE CAMERAS

For daily inspections where you need results immediately, these rugged cameras are great. HVAC/R contractors and facilities maintenance technicians looking for quick, frontline troubleshooting of hot spots will value this tool. They are ideal for users open to manual, auto, or fixed focus options, and for those who are concerned about larger ΔTs.

FLUKE CONNECT®

Precisely blended images offer more detail.

Image quality is everything when it comes to quickly analyzing infrared images. You need the right level of detail in your infrared image to pinpoint specific areas of concern. Fluke Performance Series IR cameras blend visible light and infrared images using patented IR Fusion® technology[1] to capture a clear 5MP real-world picture of your target. Blend at different preset levels and add picture-in-picture (PIP) to capture an incredibly revealing hybrid image.



Full infrared



50 % Blending , picture-in-picture mode



50 % Blending, cropped in to see detail

Easily read the breaker label with IR Fusion® technology—precisely blended visible and infrared images.



Designed for your environment.

See potential problems easily with the 3.5 inch LCD screen. The rugged, one-handed design (right or left handed) helps you work up a ladder or in virtually any environment, and leaves one hand free.

TiS75/S65/S60/S55/S50/S45/S40/S20/S10

- Get precisely focused images from as close as 15 cm (6 in) with manual focus, or choose fixed focus for faster images without the need to focus from 45 cm (1.5 ft) and beyond
- Monitor your battery charge and avoid an unexpected loss of power with the smart battery's LED charge indicator
- Get easy access to saved images with a removable SD card
- Digitally document critical information such as the location of the equipment or the motor nameplate with the infrared image using IR-PhotoNotes™ or voice annotation[1]
- Collaborate from the field in real time by wirelessly syncing images directly from your camera to the Fluke Connect® app on your smartphone, and optimize, analyze and generate reports with SmartView® desktop software[2]

[1]Features vary by model; see pages 28–30 for model specifications

[2]Within your provider's wireless service area; Fluke Connect® is not available in all countries

SOFTWARE for Fluke infrared cameras.

In the field or the office, Fluke Connect® makes it easy for you to analyze and organize thermal images in compelling reports. In addition to reports, images in Fluke Connect are available to the whole team on any mobile device, browser, or laptop so everyone can have access to the latest information.



Fluke Connect® mobile app.

Wirelessly sync images directly from your camera to Fluke Connect®. Email images to colleagues from the field to collaborate in real time. Edit and analyze images and generate reports on the go.

Download the free app by searching "Fluke Connect" in the Apple or Android app store



Fluke Connect® software for your desktop.

Powerful, new Fluke Connect® software for your Windows desktop computer makes it easy to edit images, perform advanced analytics, generate quick, customizable reports and export images to the format of your choice. Fluke Connect® is a comprehensive and connected software platform that represents the future of integrated equipment maintenance.

Download free at www.fluke.com/flukeconnectti



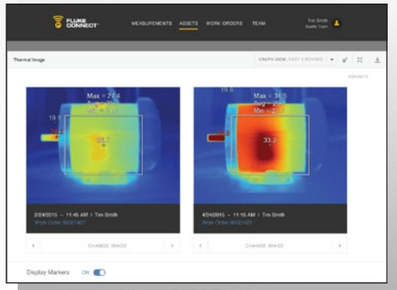
Fluke thermal imaging software features at a glance

- Download, view and wirelessly transfer thermal images
- Share images and measurements with remote team members
- Adjust level and span, IR Fusion® blending and color palettes
- Add and edit markers and color alarms
- Add text, audio and photo annotations
- Export radiometric .is2 images in BMP, JPG, PNG, GIF and TIFF format
- Create thermal imaging reports and export as PDFs
- Export temperature data in CSV or XLS format
- Search images by date, severity & title
- Free cloud storage for anywhere, anytime access (can be used offline)
- Customizable report templates
- Easy to use group editing feature

Fluke Connect® analysis and reporting software is available in all countries but Fluke Connect system is not. Please check availability with your authorized Fluke distributor.

Quick, Confident Decsions with Fluke Connect® Assets

Fluke Connect Assets wirelessly transfers images from the camera to an asset record with no mistakes. This way, your whole team can see accurate temperature trends by asset and make confident decisions.

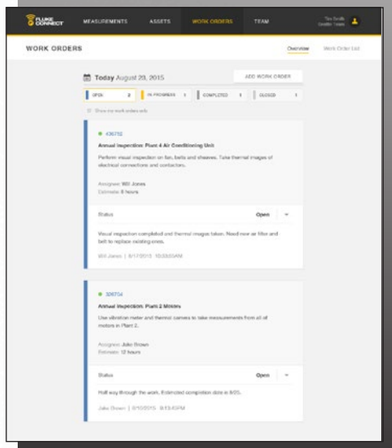


Asset Analysis dashboard: Easily compare complex data



Receive instant alarms.

Set alarms based on equipment conditions you configure. Share live video and readings to trouble-shoot problems from any location. And save yourself the time and effort of going to the plant floor or back to the office every time there is a question.



FLUKE CONNECT

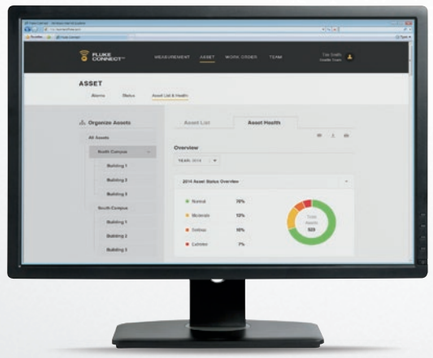
Fluke Connect® Assets

- Assign infrared images to an asset and view changes in your equipment over time
- Receive instant alarms based on asset conditions
- Generate work orders that include measurements and infrared images to provide more complete information to your maintenance teams
- Reduce your paperwork, increase your efficiency
- Minimal investment and setup time needed

Download the phone app at:

Download on the App Store

ANDROID APP ON Google play



Fluke Connect® analysis and reporting software is available in all countries but Fluke Connect system is not. Please check availability with your authorized Fluke distributor.

FLUKE®

SEE the impossible.

Telephoto lenses

The difference between finding and potentially diagnosing the problem, and not seeing any discrepancy at all. Get the detail you need, even from a distance, when you view your target magnified 2 or 4 times more than a standard lens.

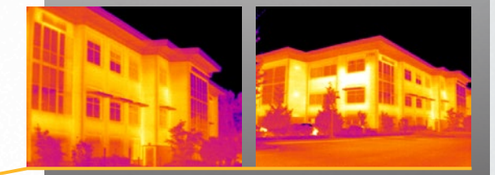


Standard (left), 2x telephoto (center) and 4x telephoto (right)—see the right level of critical infrared detail



Wide angle lenses

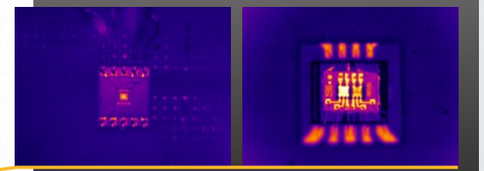
When working in a tight space, see a larger target from a close distance. Ideal for roof and building inspection or for looking through IR Windows.



Standard lens (left) and wide lens (right)—see both sides of the building at once from the same distance

Macro lenses

Get an incredibly detailed image of very small objects—as small as 25 microns, smaller than the average human hair.



Standard (left) and 25 micron macro lens (right)—see detail in very small objects

Lens type	Use for	Applications
2x telephoto	Small to medium sized target, viewed from a distance	• Maintenance, electrical, and process technicians—when equipment is too high, difficult to reach or unsafe to approach • Building inspection—see fine detail from a distance
4x telephoto	Small target, viewed from a great distance	• Petrochemical—tall stacks • Power utilities generation and transmission—long distances • Metallurgy and metals refinement—too hot to approach; may have equipment near refinery that needs inspection
Wide angle	Large target, viewed from a relatively close distance	• Maintenance, electrical and process technicians—when working in a tight space or needing to view a large area • Building inspectors—for roofing and industrial building inspections, save time by seeing a much greater area at once
Macro	Tiny to microscopic target, viewed from extremely close	• Research and development • Electronics design and validation • Microscopic thermography

CHANGE THE WAY you see digital multimeters.

Combining a full-featured digital multimeter with integrated thermal imaging, the 279 FC thermal multimeter helps you find, repair, validate and report many electrical issues quickly so that you are confident problems are solved.



FLUKE CONNECT

279 FC

- Locate the problem immediately with an 80 x 60 infrared image (non-radiometric) and center-point temperature measurement
- Full-featured digital multimeter has 15 measurement functions including: ac/dc voltage, resistance, continuity, capacitance, diode test, min/max, ac current (with iFlex®) and frequency
- Full-color 3.5 inch LCD screen provides clean, crisp readings
- Rechargeable lithium ion battery allows for a for a full work day (10+ hours) and auto power off saves battery power
- Transmit results wirelessly with the Fluke Connect® system[1]
- iFlex® option expands your measurement capabilities so you can get into tight, hard to reach spaces for current measurement (up to 2500 A ac)

[1]Within your provider's wireless service area; Fluke Connect® is not available in all countries.

FLUKE®

Designed to SEE IT ALL.

Say good-bye to spot-by-spot readings. An infrared heat map superimposed over a visual image provides the context you need to clearly see temperature-related issues—priced to outfit the whole team.



VT04/VT04A

- Handy when you need it; easily fits in your tool bag or pocket
- Intuitive enough to use right out of the box
- Easily access saved images with the removable SD card
- Save in .bmp format when you only want the image, or choose .is2 format so you can optimize images and create reports in SmartView® software (available for download at www.fluke.com/vtsmartview)
- Protect your visual IR thermometer with the included hard case (VT04) or soft case (VT04A)
- Choose your preferred way of powering your visual IR thermometer: a rechargeable Li-ion battery (VT04) or 4 AA batteries (VT04A)

For FAST, EASY, DEPENDABLE readings, these are the go-to tools.

For a quick temperature reading, it doesn't get much easier than an IR Thermometer from Fluke. So rugged and fast you'll always want to keep it with you.



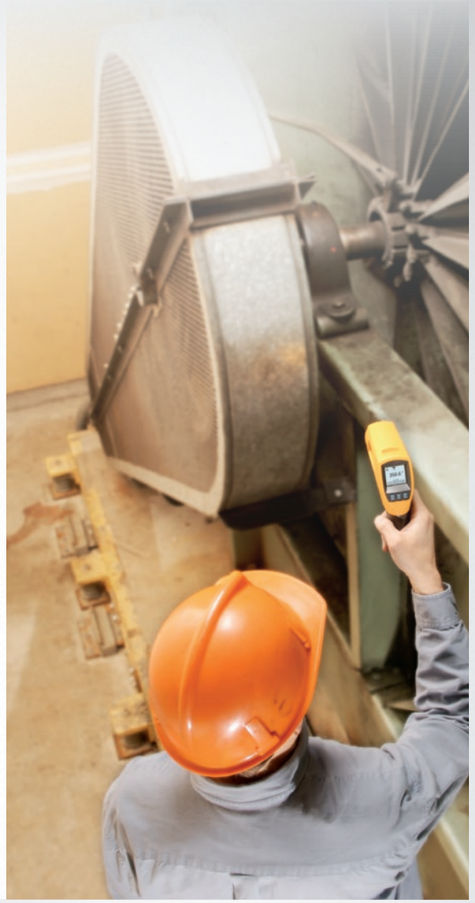
Quick and simple measurements.

With a start-up time of a mere second, you'll never have to wait on your tool. Simply pull the trigger and instantly get a spot measurement. Laser guides show where you're measuring, and dual lasers on some models indicate the area the measurement is based on.



Rugged, ready and reliable.

You have a tough job. Tough on you and your tools. That's why Fluke IR thermometers are ready for action even in harsh conditions—tested to withstand dust and water with an IP54 rating[1]. Some can even survive a 3 meter drop[1]. For rugged reliability, it's tough to beat Fluke.



572-2/568/62 MAX+/64 MAX

- Measure accurately from farther away with up to a 60:1 distance to spot ratio (*572-2* 60:1, *568* 50:1, *62 MAX+* 12:1, 64 MAX 20:1)
- Measure temperatures up to 900 °C (1652 °F): *572-2* –30 °C to +900 °C (–22 °F to +1652 °F), *568* –30 °C to +800 °C (–22 °F to +1472 °F), *62 Max+* –30 °C to +650 °C (–22 °F to +1202 °F), 64 MAX –30 °C to 600 °C (–22 °F to 1112 °F)
- Save time with available onboard, downloadable data storage of temperature readings (572-2 and 568 models)
- Get contact measurement with 2-in-1 IR thermometers (572-2 and 568 models)
- Intrinsically safe model available for use in hazardous environments including oil and gas (568 Ex)[2].
- Identify the area you're measuring with dual-laser sighting on the 572-2 and the 62 Max+ or with single-laser sighting on the 568 and 64 MAX
- Get alerts when a temperature is outside the expected range with high and low alarms
- Flashlight (64 MAX) and large, easy-to-read backlit LCD display for easy viewing even in a dark environment
- Capture spot temperatures unattended (64 MAX)
- 99 data point logging (64 MAX)

[1]Testing was done on the 62 Max and 62 Max+
[2]See 568 Ex product page on Fluke website for details

Increase the SAFETY and SPEED of your electrical infrared inspections.

A company's greatest investment is not the equipment that's behind the panel door. It's the electricians, engineers and inspectors who risk their lives every day doing their jobs.



CV400/401/300/301/200/201

- Highest arc blast safety rating available—63 kA when properly installed
- Under 5 minute installation with 1 person; no need to remove panel door
- Available in 2 inch (50 mm), 3 inch (75 mm), and 4 inch (100 mm) sizes with convenient ¼ turn access or security key access options
- Clearly view equipment both visually and thermally with ClirVu® coating that protects the optic from the elements
- Corrosion and UV resistant for challenging outdoor environments—IP67 rugged

EXPAND the capabilities of your infrared camera.

Batteries and chargers

Expand your powering capabilities with an extra battery, charging base or car charger. All Fluke Professional and Performance series cameras feature interchangeable smart batteries. With the LED charge indicator, monitor your battery charge and avoid an unexpected loss of power with a push of a button.

Product	Description
SBP3	Rechargeable lithium-ion smart battery
SBP4	Rechargeable lithium-ion smart battery
SBC3B	Battery charging base
TI-CAR CHARGER	Car charger

Tripod mounts

Get sharp, steady images by attaching your camera to a tripod with a tripod mount (TRIPOD3). Set your camera to auto-capture to get multiple shots of the same target.

Sun visors

No need to squint when working outside. Get a sun visor (VISOR3) for your camera to reduce screen glare.


SBP3 rechargeable battery


SBP4 rechargeable battery


Battery charging base


Car charger


Tripod mount


Sun visor

Not all accessories are compatible with all cameras.

SPECIFICATIONS

	Expert Series Thermal Imagers					
	TiX1000	**TiX620**	**TiX580**	**TiX560**	**TiX520**	**TiX500**
IFOV (spatial resolution)	0.6 mRad	0.85 mRad	0.93 mRad	1.31 mRad		
Detector resolution	1024 x 768 (786,432 pixels) SuperResolution mode: 2048 x 1536 (3,145,728 pixels)	640 x 480 (307,200 pixels) SuperResolution mode: 1280 x 960 (1,228,800 pixels)		320 x 240 (76,800 pixels) SuperResolution mode: 640 x 480 (307,200 pixels)		
Field of view	32.4 °H x 24.7 °V	32.7 °H x 24 °V	34 °H x 24 °V	24 °H x 17 °V		
Compatible lenses	2 wide angle, 2 telephoto, 3 macro and 1 standard	1 wide angle and 1 telephoto	Pre-calibrated smart lenses – TiX580: 2x telephoto and wide angle; TiX560, TiX520, TiX500: 2x and 4x telephoto, wide angle, 25 micron macro			
Wireless connectivity	–		Fluke Connect® app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN[1]			
IR-Fusion®	AutoBlend™ mode, continuous blending				AutoBlend™ mode	
Picture-In-Picture (PIP)	Picture-in-Picture					
Focus system	LaserSharp® Auto Focus, auto focus, manual focus, and EverSharp multifocal recording	Auto focus, manual focus, and EverSharp multifocal recording	MultiSharp™ Focus, LaserSharp® Auto Focus with built-in laser distance meter and advanced manual focus			
Display	Extra-large 5.6 inch color TFT display, 1280 x 800 pixel resolution, suitable for daylight operation		5.7 inch touchscreen LCD, 640 x 480 pixel resolution			
Design	Camcorder		Ergonomic design with a 240 degree rotating lens			
Thermal sensitivity*	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.04 °C at 30 °C target temp (40 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.03 °C at 30 °C target temp (30 mK)	≤ 0.04 °C at 30 °C target temp (40 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)
Temperature measurement range	–40 °C to +1200 °C (–40 °F to +2192 °F) High temperature option—request at time of order: up to 2000 °C (3632 °F)	–40 °C to +600 °C (–40 °F to +1112 °F) High temperature option—request at time of order: up to 2000 °C (3632 °F)	–20 °C to +800 °C (–4 °F to +1472 °F)	–20 °C to +1200 °C (–4 °F to +2192 °F)	–20 °C to +850 °C (–4 °F to +1562 °F)	–20 °C to +650 °C (–4 °F to +1202 °F)
Frame rate	30 Hz or 9 Hz versions		60 Hz or 9 Hz versions			
Subwindowing modes available: (add-on at time of order—subwindowing options are not available on 9 Hz models)	Option 1: 640 × 480 (60 fps) Option 2: 384 × 288 (120 fps) Option 3: 1024 × 96 (240 fps)	384 × 288 (60 fps)	–			
Software	SmartView® desktop software		SmartView® desktop software and Fluke Connect mobile app[1]			
Voice annotation	60 seconds maximum recording time per image, reviewable playback on camera; Bluetooth headset provided (where available)					
Text annotation	Yes					
Video recording	Standard and radiometric					
Streaming video (remote display)	Via HDMI; GigE Ethernet available in SmartView® software		Yes, see the live stream of the camera display on your PC, smartphone, or TV monitor. Via USB, WiFi hotspot, or WiFi network to Smartview® software on a PC; via WiFi hotspot to the Fluke Connect® app on a smartphone; or via HDMI to a TV monitor			
Remote control operation	Yes		Yes, through Smartview® desktop software or Fluke Connect mobile app[1]			
Alarms	High temperature, low temperature, and isotherms (within range)					
Warranty	Two-years (standard), extended warranties are available					

	Professional Series Thermal Imagers						
	Ti480 PRO	**Ti450 PRO**	**Ti450 SF6**	**Ti480**	**Ti450**	**Ti400**	**Ti300**
IFOV (spatial resolution)	0.93 mRad	1.31 mRad		0.93 mRad	1.31 mRad		1.75 mRad
Detector resolution	640 x 480 (307,200) or 1280 x 960 with SuperResolution (1,228,800 pixels)	320 x 240 (76,800 pixels) or 640 x 480 with SuperResolution (307,200 pixels) 320 x 240 (76,800 pixels)		640 x 480 (307,200 pixels) SuperResolution mode: 1280 x 960 (1,228,800 pixels)	320 x 240 (76,800 pixels) SuperResolution mode: 640 x 480 (307,200 pixels)	320 x 240 (76,800 pixels)	240 x 180 (43,200 pixels)
Field of view	34° H x 24° V	24 °H x 17 °V		34 °H x 24 °V	24 °H x 17 °V		
Compatible lenses	Pre-calibrated smart lenses: wide angle, 2x and 4x telephoto, 25 micron macro		Pre-calibrated smart lenses: wide angle, 2x and 4x telephoto	Pre-calibrated smart lenses – Ti480: 2x telephoto, wide angle	Pre-calibrated smart lenses: 2x and 4x telephoto, wide angle		
Wireless connectivity	Fluke Connect® app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN[1]						
IR-Fusion®	Five modes of image blending (AutoBlend™ mode, Picture-in-Picture (PIP), IR/Visible alarm, Full IR, Full visible light) add the context of the visible details to your infrared image						
Focus system	MultiSharp™ Focus, LaserSharp® Auto Focus with built-in laser distance meter and advanced manual focus					LaserSharp® Auto Focus with built-in laser distance meter and advanced manual focus	
Display	3.5 inch touchscreen LCD, 640 x 480 pixel resolution						
Design	Rugged, ergonomic design for one-handed use						
Thermal sensitivity*	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.025 °C at 30 °C target temp (25 mK)		≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.03 °C at 30 °C target temp (30 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)	
Temperature measurement range	≤ –10 °C to +1000 °C (–14 °F to 1832 °F)	–10 °C to 1500 °C (14 °F to 2732 °F)	–20 °C to +1200 °C (–4 °F to +2192 °F)	–20 °C to +800 °C (–4 °F to 1472 °F)	–20 °C to +1200 °C (–4 °F to +2192 °F)		–20 °C to +650 °C (–4 °F to +1202 °F)
Frame rate	60 Hz or 9 Hz versions						
Subwindowing modes available: (add-on at time of order—subwindowing options are not available on 9 Hz models)	–						
Software	SmartView® desktop software and Fluke Connect mobile app[1]						
Voice annotation	60 seconds maximum recording time per image; reviewable playback on camera; optional bluetooth headset available but not required						
Text annotation	Yes						
Video recording	Standard and radiometric						
Streaming video (remote display)	Yes, see the live stream of the camera display on your PC, smartphone, or TV monitor. Via USB, WiFi hotspot, or WiFi network to SmartView® software on a PC; via WiFi hotspot to the Fluke Connect® app on a smartphone; or via HDMI to a TV monitor						
Remote control operation	Yes, through Smartview® desktop software or Fluke Connect mobile app[1]						
Alarms	High temperature, low temperature, and isotherms (within range)						
Warranty	Two-years (standard), extended warranties are available						

*Best possible.
[1]Within your provider's wireless service area; Fluke Connect® is not available in all countries.

SPECIFICATIONS

	Performance Series Thermal Imagers					
	TiS75	**TiS65/60**	**TiS55/50**	**TiS45/40**	**TiS20**	**TiS10**
IFOV (spatial resolution)	2.0 mRad	2.4 mRad	2.8 mRad	3.9 mRad	5.2 mRad	7.8 mRad
Detector resolution	320 x 240 (76,800 pixels)	260 x 195 (50,700 pixels)	220 x 165 (36,300 pixels)	160 x 120 (19,200 pixels)	120 x 90 (10,800 pixels)	80 x 60 (4,800 pixels)
Field of view	35.7 °H x 26.8 °V					
Compatible lenses	–					
Wireless connectivity	Fluke Connect® app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN[1]					
IR-Fusion®	Five modes of image blending (AutoBlend™ mode, Picture-in-Picture (PIP), IR/Visible alarm, Full IR, Full visible light) add the context of the visible details to your infrared image					–
Focus system	Manual focus	Manual focus (TiS65), Fixed focus (TiS60)	Manual focus (TiS55), Fixed focus (TiS50)	Manual focus (TiS45), Fixed focus (TiS40)	Fixed focus	
Display	3.5 inch (landscape) 320 x 240 LCD					
Design	Rugged, lightweight, ergonomic design for one-handed use					
Thermal sensitivity*	≤ 0.08 °C at 30 °C target temp (80 mK)			≤ 0.09 °C at 30 °C target temp (90 mK)	≤ 0.10 °C at 30 °C target temp (100 mK)	≤ 0.15 °C at 30 °C target temp (150 mK)
Temperature measurement range	-20 °C to +550 °C (–4 °F to +1022 °F)		-20 °C to +450 °C (–4 °F to +842 °F)	-20 °C to +350 °C (–4 °F to +662 °F)		-20 °C to +250 °C (–4 °F to +482 °F)
Frame rate	30 Hz or 9 Hz versions	30 Hz or 9 Hz versions (TiS65), 9 Hz (TiS60)	30 Hz or 9 Hz versions (TiS55), 9 Hz (TiS50)	30 Hz or 9 Hz versions (TiS45), 9 Hz (TiS40)	9 Hz	
Software	Fluke Connect mobile app and SmartView® desktop software[1]					
Voice annotation	60 seconds maximum recording time per image, reviewable playback on camera; Bluetooth headset available separately (where available)				–	
Text annotation	–					
Video recording	Standard and radiometric		–			
Streaming video (remote display)	Yes, to Fluke Connect® Smartview® desktop software or mobile app		–			
Remote control operation	–					
Alarms	High temperature, low temperature, and isotherms (within range)			High temperature, low temperature	–	
Warranty	Two-years (standard), extended warranties are available					

*Best possible.
[1]Within your provider's wireless service area; Fluke Connect® is not available in all countries.

FLUKE®

Fluke infrared tools are on the job because they do the job.

Questions?
Contact your local Fluke representative for more information, or go to our website and request your free product demonstration.

Fluke training
Between our online videos and seminars, and live classes with our training partner, The Snell Group, you can continue to grow as a thermographer and infrared technician.



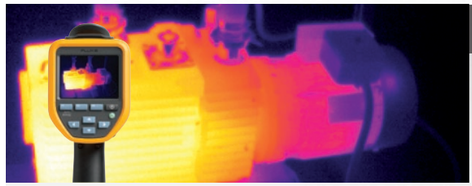
Expert Series

When you cannot be wrong, the Expert Series offers extremely detailed images. Plus, view images on a large, rotating, touchscreen display.



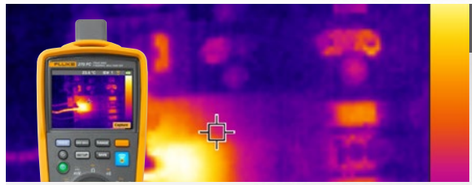
Professional Series

Focus with laser speed and accuracy on your designated target with LaserSharp® Auto Focus. Get highly detailed images and advanced features.



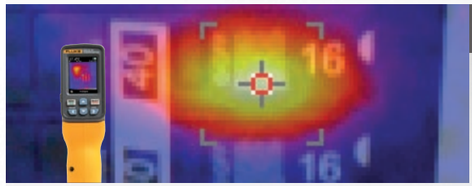
Performance Series

Get detailed images in an affordable infrared camera that's rugged and reliable. The perfect tool for a quick inspection.



Thermal Multimeter

A full-featured digital multimeter with integrated thermal imaging



Visual IR Thermometer

An infrared heat map with hot and cold markers reveals potential areas of concern. See issues in context by blending the heat map with a visual image.



IR Thermometer

Get a quick temperature reading, even from a distance, with up to a 60:1 distance to spot ratio and a start-up time of a mere second.

FLUKE®

Fluke. *Keeping your world up and running.*®

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

Fluke Europe B.V.
PO Box 1186, 5602 BD
Eindhoven, The Netherlands

For more information call:
In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa +31 (0)40 267 5100
or Fax +31 (0)40 267 5222
In Canada (800)-36-FLUKE or
Fax (905) 890-6866
From other countries +1 (425) 446-5500
or Fax +1 (425) 446-5116
Web access: http://www.fluke.com

©2006-2017 Fluke Corporation.
All trademarks are the property of their respective owners. Specifications subject to change without notice. 12/2017 2674264u-en

Modification of this document is not permitted without written permission from Fluke Corporation.