



# **Infrared Camera Selection Guide**

TiX580			Yes, in software.	-20 °C to +1,000 °C (-4 °F to 1,832 °F)				Yes, focused throughout the field of view	əry. Single. Time	aly focused images and in					ttery pack	
Ti480 PRO		640 × 480 (307,200 pixels)	Yes, in s	-20 °C to (-4 °F to	0.93 mrad, D:S 1065:1	$34^{\circ} \text{H} \times 24^{\circ} \text{V}$	15 cm (5.9 in)	Yes, focused through	Yes, for consistently in-focus images. Every. Single. Time	ice to the target for precisely displays distance on screen	Yes	(ple)	saving and sharing		2-3 hours continuous use per battery pack	
Ti401 PRO				-20 °C to +650 °C (-4 °F to +1,202 °F)					Yes, for consisten	Yes, calculates distance to the target for precisely focused images and displays distance on screen		ViFi to LAN (where availa	Fluke Connect™ app for	s to your infrared image	2-3 hours	
TiS75+		384 × 288 (110,592 pixels)		-20° C to 550° C (-4 °F to +1,022 °F)	1.91 mrad	42° H × 30° V	50 cm (19.68 in)	_	Manual Focus		Manual Focus	roid™ 4.3 and up, and W	omatically upload to the	continuous 0% to 100%. Adds the context of the visible details to your infrared image	3.5 hours continuous (without Wifi)	standard)
TiS60+		320 × 240 (76,800 pixels)		-20° C to 400° C (-4 °F to +752 °F)	1.86 mrad, D:S 532:1	34.1° H × 25.6° V	46 cm (18.11 in)	-	Fixed Focus		Fixed Focus	" (iOS 4s and later), And	e, and images taken aut	o to 100%. Adds the con	4 hours continuous use per battery pack	Two years (standard)
TiS55+		256 × 192 (49,152 pixels)	1	-20° C to 550° C (-4 °F to +1,022 °F)	1.91 mrad	28° H × 20° V	50 cm (19.68 in)	1 -	Manual Focus	1	Manual Focus	Yes, to PC, iPhone™ and iPad™ (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN (where available)	Yes*, connect your camera to your smartphone, and images taken automatically upload to the Fluke Connect™ app for saving and sharing	AutoBlend continuous 0%	3.5 hours continuous (without Wifi)	
TiS20+/ Ti20+ MAX		× 90 pixels)		-20° C to 400° C (150° C for TiS20+) (-4° F to 752° F (302° F for TiS20+))	D:S 130:1	. 38° V	9.68 in)	-	Focus		Focus	Yes, to	Yes*, connect your ca	ł	<pre>&gt; 5 hours continuous (without WiFi)</pre>	
PT1120		120 × 90 (10,800 pixels)		-20° C to 400° C (150° C for TiS20+ (-4° F to 752° F (302° F for TiS20+))	7.6 mrad, D:S 130:1	20° H × 38° V	50 cm (19.68 in)		Fixed Focus		Fixed Focus				<pre>≥ 2 hours continuous (without WiFi)</pre>	
	Key Features	Infrared Resolution	SuperResolution	Temperature Range	IFOV with Standard Lens (spatial resolution)	Field of View	Minimum Focus Distance	MultiSharp Focus	LaserSharp Auto Focus	Laser Distance Meter	Advanced Manual Focus	Wireless Connectivity	Fluke Connect™ App Compatible	IR-Fusion Technology	Battery Life	Warranty

## Fluke Baseline™ Thermal Imaging Software



# **BASELINE**

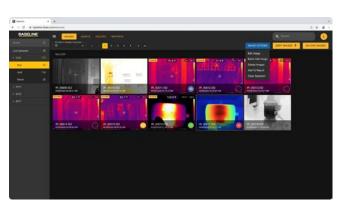


## Get thermal imaging jobs done easily and reliably with Baseline

The Baseline web application brings together everything you need to set up and run your own thermal imaging program.

Fluke Baseline Thermal Imaging Software allows users to fulfill all their thermal imaging (TI) job needs. The first cloud–and-subscription-based TI software, Baseline is a web app that allows users easy access from any smart device without installing a desktop app. Baseline has the image optimizing and analyzing features of SmartView™ and the reporting capabilities of Fluke Connect™. It is designed with thermal technicians and their workflow, beginning to end, in mind. Using the free version, users can manage thousands of thermal images from their Fluke thermal imaging camera (supported cameras listed below). They can select desired images from image management and use image analysis to optimize, analyze, and label the status of the asset featured in the TI image. Once the images are ready, the user can add them to an existing report or create a new report. Completed reports can be downloaded and delivered for review. The best part is that these features are all included in the free version of Baseline.

Visit baseline.fluke.com to get started for FREE!



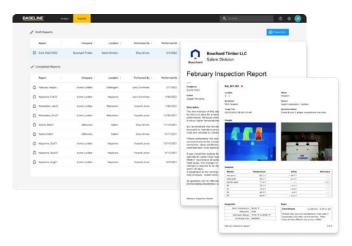
## **Powerful image management**

Finally say goodbye to the extra steps of file management. Simply upload your images to Baseline and you can easily sort and organize in one place.



## Sophisticated image analysis

Leverage analysis tools to keep track of thermal scans from your thermal imaging program. Optimize your time with the tools available in Baseline.



## **Improved thermal reports**

Share results from your work quickly and easily. Baseline serves up professional thermal imaging reports with the click of a button.

## **How to try Baseline for FREE**

#### Step

Visit baseline.fluke.com on your local browser

#### Step 2

Click "Get Started for Free" or "Sign Up" to create a new account

#### Step 3

That's it! You are all set to try out Baseline. Users can go through a quick walkthrough of the product to get started.

# Fluke Baseline™ Thermal Imaging Software



## **Available for FREE**

What it includes	The benefits	What it does
Image management	Keep images and thermal imaging programs organized and on track all in one place. No software download needed. Upload thermal images to your account from any device.	Upload and sort images     Manage number of images displayed     Analyze uploads by month
Image analysis	Spend more time on image analysis, and less time managing images.  Directly add images to report with auto-filled image	Optimize images     Analyze thermal images and adjust controls     Temp scale     Level and span with auto scale     Picture-in-Picture mode     IR Fusion     Parallax center and adjust     Delta T     Standard and user defined markers     Additional features      Notes and Status      View thermal image information     Create draft report, edit report, and complete report
Reports	details and notes. Easily create, edit, or download a report.	Create draft report, edit report, and complete report     Download pdf of draft or completed report (s)
Assets and Work events	<ul> <li>Improve efficiency by planning detailed inspections with ease.</li> <li>Consolidate tool information and tasks around assets registered in Baseline.</li> <li>Register thermal imaging work events into Baseline to easily plan and schedule for on-site visits.</li> </ul>	Work events and assets combine to support better work management     Assets can be organized into work events     By registering assets into our system, the user can consolidate all information and tasks around that particular asset     By registering work events into our system, the user can easily do planning and scheduling for their on-site visit

## **Supported cameras**

Thermal cameras	Ti300	Ti300+	Ti400	Ti400+	Ti450	Ti401	Ti480	Ti480 PRO	TiX500	TiX520	TiX560	TiX501	TiX580
Baseline	•	•	•	•	•	•	•	•	•	•	•	•	•

Visit baseline.fluke.com to get started for FREE!



## **Fluke Thermal Imaging Software**





## Fluke Connect™ Desktop for Thermal Imaging

Get the most out of your thermography program. Create professional inspection reports in minutes while efficiently capturing full radiometric data to support preventive and predictive maintenance programs with the new Fluke Connect $^{\text{TM}}$  Desktop software.

- · Easily edit and optimize images to visualize equipment status
- Combine infrared and visible images for simpler analysis using picture-in-picture mode and image blending
- Create detailed reports in minutes and save customized report templates
- Connect a camera to your computer wirelessly with the built in Fluke Camera WiFi
- Never lose your data automatically save all your thermal images and reports in the Fluke Connect™ cloud storage, accessible anytime on PC or Mobile App
- · Organize images and easily search by asset, severity, and image title
- Enhance inspection credibility by incorporating live readings of energized circuits and operational equipment from Fluke Connect™ enabled test tool into your infrared image
- Share images immediately with team members with the Fluke Connect™ Mobile App

Fluke Connect™ Desktop has all the same features as SmartView and more, with intuitive navigation interface and the advantage of Fluke Connect™ cloud storage.

Download Fluke Connect<sup>TM</sup> Desktop FREE from the Fluke website and the Fluke Connect<sup>TM</sup> Mobile app from the mobile IOS or Android app store.





## Get more out of your thermal inspections with Fluke Connect™ Wireless Modules

You can connect up to 5 Fluke Connect  $^{\text{IM}}$  Wireless modules with a Fluke Infrared Camera, while incorporating live readings on the infrared image. The table below highlights a list of Fluke Connect  $^{\text{IM}}$  enabled tools that are compatible with Fluke Infrared Cameras.

## Fluke Connect™ Compatibility Guide

Fluke Connect™ Tools	Fluke Connect™ App	3000 FC	902 FC	376/375 /374 FC	a3000 FC a3001 FC	a3002 FC	a3003 FC a3004 FC	v3000 FC	v3001 FC	t3000 FC
Fluke Connect™ App – iOS and Android™	•	•	•	•	•	•	•	•	•	•
TiX580 Infrared Camera	•	•	•	•	•	•	•	•	•	•
Ti480PRO Infrared Camera	•	•	•	•	•	•	•	•	•	•
PTi120/TiSxx Series Infrared Cameras	•	•	•	•	•	•	•	•	•	•





# Get the FREE Fluke Connect™ App!

Download the free Fluke Connect™ Desktop from the Fluke website and the Fluke Connect™ Mobile app from the mobile IOS or Android app store.





# **Industrial Imaging**

## Fluke PTi120 Pocket Infrared Camera





Fluke PTi120



Key f

Fluke Connect $^{\text{\tiny TM}}$  Instant Upload



## Infrared troubleshooting power you need, right in your pocket

A fully radiometric thermal imager with a 3.5" LCD touchscreen that offers IR-Fusion™ to blend a visible light image with an infrared image to easily locate problems. The PTi120 has built in WiFi that allows you to connect your camera to the Fluke Connect™ App and share images remotely with your team. Compact and easy to use, the Fluke PTi120 should be your first line of defense with maintenance work.

- 120 × 90 infrared resolution (10,800 pixels)
- -20° C to 400° C (-4° F to 752° F) temperature measurement range
- 8.89 cm (3.5 in) LCD touchscreen display with intuitive interface for easy troubleshooting
- 1 m (3.28 ft) drop tested
- IP54 enclosure rating
- Touchscreen IR-Fusion blends a visible light image with an infrared image, simply slide your finger across the screen to adjust
- Two-year warranty





ney leatures	PIIIZU
IFOV (Spatial Resolution)	7.6 mrad
Infrared Resolution	120 × 90
Field of View	50° H × 38° V
Frame Rate	9 Hz
Distance to Spot	130:1
Temperature Measurement Range (not calibrated below -10° C)	-20° C to <b>400° C</b> (-4° F to <b>752° F</b> ) <b>NEW</b>
Thermal Sensitivity	60 mK
Focus system	Fixed focus, minimum focus distance 22.8 cm (8.97 in)
Center-point temperature	Yes
Spot temperature	Hot and cold spot markers
Battery	≥2 hours (without WiFi), can be charged via USB cable

Yes, connect your camera to your building's WiFi network, and images

taken automatically upload to the Fluke Connect  $^{\mathtt{m}}$  mobile App for

storage and viewing on your PC.



## **Get the FREE** Fluke Connect™

By using the Fluke Connect™ App, you can efficiently and safely capture, store and share maintenance data without leaving the field. You can securely connect and collaborate with others, so they can see what you see.





#### **Included Accessories**

Soft Case, Lanyard and USB cable.

## **Ordering Information**

FLK-PTI120 9HZ 400C

Fluke Pocket **Infrared Camera** 



## **Fluke Performance Series Infrared Cameras**

TiS20+, TiS20+ MAX, TiS55+, TiS60+ and TiS75+





Fluke TiS75+

## Easy-to-use frontline troubleshooting

Easily see potential problems with blended IR and visual images, on a large 8.89 cm (3.5 in) LCD display. Fluke Performance Series Infrared Cameras are one-handed pistol grip models that make on-site thermal inspections quicker and easier.

#### **Manual Focus**

Focus is one of the most critical aspects of a thermal image because it cannot be altered with software. Both manual and fixed focus options are available on the latest TiS55+ and TiS75+ infrared cameras, leveraging the advantages of both optical systems and making this ideal for both seasoned thermographers and users new to thermography.

- Measure up to 550° C (1,022 °F) (TiS55+ and TiS75+) to handle a wide range of applications
- Manual and fixed focus (TiS55+ and TiS75+)
- IS3 and AVI video recording (TiS75+ only)
- Dew point calculation (TiS75+ only)
- Digitally document critical information with your infrared image using IR-PhotoNotes™ or voice annotation with TiS55+, TiS60+ and TiS75+
- Make decisions in real time—wirelessly sync images from your camera, create and email reports all with your smart phone and the Fluke Connect™ App
- Monitor battery charge and avoid unexpected loss of power with the smart battery with LED charge indicator
- Two-year warranty



<b>Key features</b>	TiS20+	TiS20+ MAX	TiS55+	TiS60+	TiS75+	
Infrared Resolution	120 × 90 (10,800 pixels)	120 × 90 (10,800 pixels)	256 × 192 (49,152 pixels)	320 × 240 (76,800 pixels)	384 × 288 (110,592 pixels)	
IFOV (Spatial Resolution)	7.6 mrad	7.6 mrad	1.91 mrad	1.86 mrad	1.91 mrad	
Field of View	50° H × 38° V	50° H × 38° V	28° H × 20° V	34.1° H × 25.6° V	42° H × 30° V	
Thermal Sensitivity (NETD)**	60 mK	60 mK	40 mK	45 mK	40 mK	
Temperature Measurement Range	-20° C to 150° C (-4°F to 302° F)	-20° C to 400° C (-4°F to 752° F)	-20° C to 550° C (-4°F to 1,022° F)	-20° C to 400° C (-4°F to 752° F)	-20° C to 550° C (-4°F to 1,022° F)	
Focus Systems	Fixed focus	Fixed focus	Manual focus and 1 meter focus marker	Fixed focus	Manual focus and 1 meter focus marker	
IR-Fusion AutoBlend Continuous 0% to 100%.	Yes	Yes	Yes, including Picture in Picture (PIP)			
Display	8.89 cm (3.5 in) (landscape) 320 × 240 LCD touch screen	8.89 cm (3.5 in) (landscape) 320 × 240 LCD touch screen	8.89 cm (3.5 in) (landscape) 640 × 480 LCD touch screen	8.89 cm (3.5 in) (landscape) 320 × 240 LCD	8.89 cm (3.5 in) (landscape) 640 × 480 LCD touchscreen	
Colour Alarms	-	-	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	
IR PhotoNotes and Voice Annotations	-	-	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes¹	
Software Fluke Connect™ Desktop Software – full analysis and reporting software with access to the Fluke Connect™ system						

<sup>&</sup>lt;sup>1</sup>Refer to product datasheet for more details.





Combine with a Fluke ClirVu™ Infrared Window to conduct thermal inspections without having to open the electrical panel.

#### **Included Accessories**

**Infrared camera:** AC Power Supply, Lithium-ion Smart Battery, USB Cable and Soft Transport Bag.

Fluke TiS55+ also includes 4GB Micro-SD-Card, Hand Carrying Case and adjustable Hand Strap.

Fluke TiS60+ & TiS75+ also includes 4GB Micro-SD-Card, Two-bay Smart Battery Charger, Two Lithium-ion Smart Batteries, Hand Carrying Case and adjustable Hand Strap.

#### **Ordering Information**

•	
FLK-TIS20+ 9Hz	Infrared Camera
FLK-TIS20+ MAX 9Hz	Infrared Camera
FLK-TIS55+ 27Hz	Infrared Camera
FLK-TIS60+ 9Hz	Infrared Camera
FLK-TIS60+ 30Hz	Infrared Camera
FLK-TIS75+ 27Hz	Infrared Camera

## Fluke Ti480 PRO Infrared Camera





Fluke Ti480 PRO

Video Recording

Remote Control

Operation

Alarms

Wireless

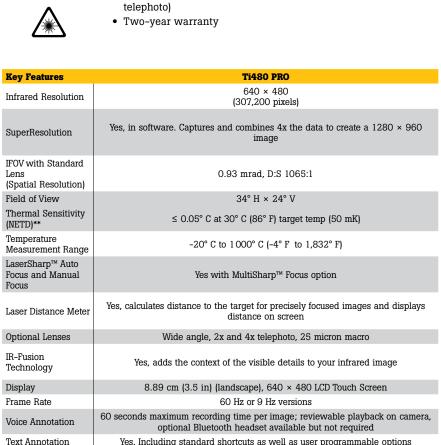
Software

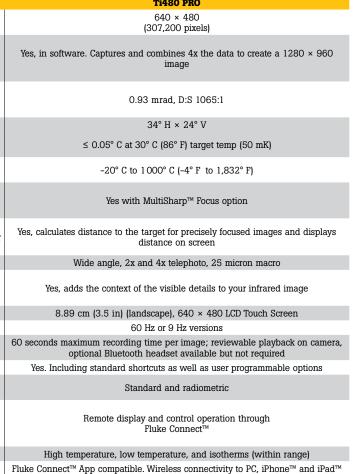
Connectivity

#### **Enhanced resolution across all levels**

Get clear, accurate focus on objects near and far with MultiSharp™ focus, or focus with laser speed and accuracy on your designated target with LaserSharp™ Auto Focus. Easily navigate the menu and view images on a 8.89 cm (3.5 in), 640  $\times$  480 touchscreen. Get more from your camera with an optional 2x or 4x telephoto or wide angle smart lens - no calibration required.

- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create a 1280  $\times$  960 image
- Save time. Wirelessly sync images directly from your camera to the Fluke Connect™ system, and attach to an asset record or work order
- Reduce the need to take notes in the field with two helpful features:
- IR-PhotoNotes<sup>™</sup> annotation system captures digital images of the surrounding area to reference conditions or actual location - Additional details can also be saved to the file with voice
- Field of view: (34° H × 24° V)
- · View all your assets with increased accuracy using one of the four optional lenses (macro, wide-angle, 2x telephoto and 4x





(iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN

Full analysis and reporting software with access to the Fluke Connect™ system







FLK-LENS/TELE2 FLK-LENS/WIDE2 Telephoto infrared lens (2x magnification)

Wide-angle infrared





**FLK-TI-VISOR3 TI-TRIPOD3**Thermal Imager Visor Tripod Mounting Base





FLK-TI-BLUETOOTH

TI-SBP3 itional Smart Battery



FLK-TI-SBC3B Additional Smar Battery Charger



## **Included Accessories**

AC Power Supply and Battery Pack Charger, Two Rugged Lithium-Ion Smart Battery Packs, USB Cable, HDMI Video Cable, 4GB Micro SD Card, Adjustable Hand Strap.

## **Ordering Information**

9Hz

FLK-TI480 PRO Infrared Camera

FLK-TI480 PRO Infrared 60Hz

Camera



## Fluke TiX580 Infrared Camera





Fluke TiX580









# 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 targets that were once impossible to see.

- **Resolution:** 640 × 480 (307,200 pixels)
- Temperature range: -20° C to 1000° C (-4° F to 1,832° F)
- Premium in-field viewing experience with a 5.7 inch responsive touchscreen LCD
- See the details you need with smart lenses— 2x and 4x telephoto, wide angle, and 25 micron macro—no calibration required, interchangeable between compatible cameras
- See, save and share from the field and connect to the largest selection of wireless test and measurement tools with the Fluke Connect™ App
- Two-year warranty

## LaserSharp™ Auto Focus

Get an in-focus image like never before with just a touch of a button. LaserSharp™ Auto Focus, exclusive to Fluke, uses its built-in laser distance meter to calculate the distance to your designated target with pinpoint accuracy. On target and in-focus. Every. Single. Time.

## **Brilliant Image Quality**

Enhanced image quality and temperature measurement accuracy can turn your  $640 \times 480$  images (307,200 pixels) into  $1280 \times 960$  images (1,228,800 pixels). That's  $4 \times$  the resolution and pixels with SuperResolution.

Key Features	TiX580
Infrared Resolution	640 × 480 (307,200 pixel) SuperResolution mode: 1280 × 960 (1,228,800 pixels) (TiX580)
IFOV (Spatial Resolution)	0.93 mrad
Field of View	34° H × 24° V
Distance to Spot	753:1
Thermal Sensitivity	≤ 0.05° C at 30° C (86° F) target temp (50 mK)
Temperature Range	-20° C to 1000° C (-4° F to 1,832° F)
Optional lenses	Pre-calibrated smart optional lenses: wide angle, 2x telephoto
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
IR-Fusion™	AutoBlend™ mode, continuous blending
Picture-In-Picture (PIP)	Yes
Software	Fluke Connect™ (web, mobile and desktop)
Video recording	Standard and radiometric
Alarms	High temperature, low temperature, and isotherms (within range)





**CV400** ClirVu™ Infrared Window

FLK-TIX5XX-NECK

## **Included Accessories**

AC Power Supply and Battery Pack Charger, Two Lithium-ion Smart Battery Packs, USB Cable, HDMI Video Cable, Hard Carrying Case, Adjustable Neck and Hand Strap, Bluetooth Headset (where available), Warranty Registration Card and Calibration Certificate. Flash Drive includes Product Manuals and SmartView™ Software.

## **Ordering Information**

FLK-TiX580 9Hz Infrared Camera FLK-TiX580 60Hz Infrared Camera

## Fluke CV Series ClirVu™ Infrared Windows





Fluke CV200

Fluke CV300



# Compliance without compromise. Safety without sacrifice.

Increase the safety and speed of electrical thermal imaging inspections with Fluke ClirVu $^{\text{\tiny M}}$  IR Windows. Reduce the risk of arc-flash and electrocution, increase the safety of your personnel and reduce the time and cost of preventive maintenance.

- Save time with a quick and easy five-minute or less installation
  - One technician
  - One hole with standard Greenlee™ punch
  - Panel door does not need to be removed
  - Grounds instantly to metal enclosure with patent–pending AutoGround  $^{\!{}^{\text{TM}}}$  process
  - Maintains panel arc test ratings up to 63 kA when properly installed
- Torture Tested<sup>™</sup> to the highest arc blast test ratings
  - IEEE C37.20.7: 63 kA Arc tested at KEMA, UL 50/50E/50V, UL 1558, IEC 60529-1: IP67, IEC 60068, NEMA 4/12, CSA C22.2 NO.14-13:2012, and CE
- Convenience of both quick turn (CV400, CV300, CV200) or security keyed access (CV401, CV301, CV201)
- Available in three sizes 50 mm (1.96 in), 75 mm (2.95 in) and 95 mm (3.74 in)
- Work permit requirements and NFPA 70E processes are significantly reduced
- Full PPE is often not required so inspections are done faster and more conveniently
- Lifetime replacement warranty against manufacturing defects

#### **Specifications** CV400 CV401 CV300 CV301 CV200 Size 95 mm (3.74 in) 75 mm (2.95 in) 50 mm (1.96 in) Voltage Range Any **NEMA Environment Type** Type 4/12 (indoor/outdoor) AutoGround™ ClirVu™ Optic –40° C to 232° C and 260° C (–40° F to 449.6° F and 500° F) Intermittent Operating temperature Body material EZAC & ZA-27 High Strength Zinc/ Aluminum Alloy **Ratings and testing** 63 kA for 30 cycles @ 60 Hz Arc-Tested (IEEE C37.20.7) UL 50V component recognition UL 50, UL 50E/NEMA NEMA Type 4/12 **Environmental Rating** UL 1558 CSA C22.2 No. 14, No. 94 Yes CSA Type Rating Type 4, 12 Ingress Protection (IEC 60529) IP67 IEC 62271-100, 200: Up to 11 kV marine switchgear, indoor or outdoor Lloyds Register (offshore only), IP65 Vibration rating IEC 60068-2-6: 10-2000 Hz, 5 g peak, 2.5 hr/axis Humidity rating IEC 60068-2-3: 40 C, 93% RH, 504 hr. Install Actual mounting hole 115.42 mm (4.54 in) 89.89 mm (3.53 in) 61.37 mm (2.41 in) diameter required 739BB = Greenlee Punch Kit = 742BB = 76BB =Punch/Die 2984AV/2983AV 1431AV/1432AV 441AV/442AV Security Security Security Door Latch Hand Turn Hand Turn Hand Turn Optics 95 mm (3.74 in) 75 mm (2.95 in) 50 mm (1.96 in) Optic insert diameter

# Quick & Easy Installation in 5 minutes or less







## **Included Accessories**

Hand Turn Door Latch (CV200, 300 & 400), Security Key Door Latch (301, 401) and Warranty

Fluke IR Windows are supplied complete, assembled and ready for installation.

#### **Ordering Information**

Oraering	information
FLUKE- CV200	50 mm, Infrared Window, Hand Turn Door Latch
FLUKE- CV300	75 mm, Infrared Window, Hand Turn Door Latch
FLUKE- CV301	75 mm, Infrared Window, Security Key Door Latch
FLUKE- CV400	95 mm, Infrared Window, Hand Turn Door Latch
FLUKE- CV401	95 mm, Infrared Window, Security Key Door Latch



## **Fluke Lenses**

## **Telephoto, Wide Angle and Macro**



## **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 two-times or four-times more than a standard lens.







Standard

2x Telephoto

4x Telephoto



## **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.





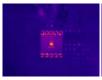
Standard Lens

Wide Lens see both sides of the building at the same time 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

25 Micron Macro Lens — see detail in very small objects

Model number	Ti401Pro	Ti480PRO	TiX580
TI-LENS/TELE2 2x Telephoto infrared smart lens†	•	•	•
TI-LENS/WIDE2 Wide Angle Infrared Smart Lens†	•	•	•
FLK-Lens/4xTele2 4x Telephoto infrared smart lens†	•	•	•
FLK-Lens/25Mac2 25 Micron macro infrared smart lens†	•	•	•

## **Ordering Information**

FLK-LENS/	2x Telephoto Infrared
TELE2	Smart Lens
FLK-LENS/	4x Telephoto Infrared
4XTELE2	Smart Lens
FLK-LENS/	Wide Angle Infrared
WIDE2	Smart Lens
FLK-LENS/	25 Micron Macro
25MAC2	Infrared Smart Lens

 $<sup>\</sup>dagger$ The lenses for TiX580, Ti480PRO are smart lenses. They come pre-calibrated and don't require calibration to a specific camera, so they are interchangeable between compatible cameras.

## Fluke DS703 FC **Diagnostic Video Borescope**





Fluke DS703 FC



Storage temperature

Operating humidity

Warranty

## **Gritty, industrial, expensive** equipment? Diagnose before teardown with the durability of Fluke

Industrial inspections require a powerful diagnostic borescope designed to stand up to the dirtiest, most harsh environments. Fluke Diagnostic Scopes put high-resolution images in the palm of your hand.

- High definition probe with dual-view camera
- High Resolution DS703 FC- 1280 × 720 (921,600 pixels)
- · Processing speeds that render a smooth, clear, consistent image
- 17.78 cm (7 in)' LCD screen for easy viewing
- · Improved battery charging and management
- Macro to micro zoom function
- · Adjustable lighting to capture the best image
- Up is Up™ technology for an appropriate orientation, regardless of the probe location
- True 720p video
- Two-year warranty

## Fluke DS703 FC High Resolution Diagnostic Scope with Fluke Connect™

Rugged, high-definition industrial 1280 × 720 resolution Diagnostic Scope with Wi-Fi capability. 22.86 cm (7 in) capacitive touch screen for accurate diagnostics in difficult to reach spaces. 720p video recording inspection camera. Up is Up™ technology rotates the display screen to allow for consistent image display, regardless of the orientation of the probe.

ICD screen  Type 7 inch Capacitive touch screen  Refresh rate 30 hz  LED backlight Adjust display brightness for optimal viewing  Communication  Wireless interface WiFi 802.11b/g/n, Range: 10.06 m (33 ft)  Data transfer USB and micro HDMI cable  FlukeConnect™ Save and share images via FlukeConnect™  Instant upload to the cloud Yes, with FlukeConnect™  General features  Color palettes Visible light, grayscale or inverted  Internal memory 6 GB  Physical buttons Intuitive, easy to navigate button technology, 4 functional keys, 4 navigational, one capture or select button  Carrying case Protective EVA case  Strap Hand Strap and Neck Strap included  Power adapter AC adapter/battery charger input  Battery 6400mAh 3.7 volt rechargeable internal li-ion battery  Battery Iife 3 hours at 50 % LED brightness  Dimensions 17.73 x 22.48 cm (6.98 x 8.85 in)  Weight 0.88 Kg (1.95 lbs)		
Refresh rate  Refresh rate  30 hz  LED backlight  Adjust display brightness for optimal viewing  Communication  Wireless interface  WiFi 802.11b/g/n, Range: 10.06 m (33 ft)  Data transfer  USB and micro HDMI cable  FlukeConnect™  Save and share images via FlukeConnect™  Instant upload to the cloud  Yes, with FlukeConnect™  Ceneral features  Color palettes  Visible light, grayscale or inverted  Internal memory  6 GB  Physical buttons  Intuitive, easy to navigate button technology, 4 functional keys, 4 navigational, one capture or select button  Carrying case  Protective EVA case  Strap  Hand Strap and Neck Strap included  Power adapter  AC adapter/battery charger input  Battery  6400mAh 3.7 volt rechargeable internal li-ion battery  Battery life  3 hours at 50 % LED brightness  Dimensions  17.73 x 22.48 cm (6.98 x 8.85 in)  Weight		DS703 FC
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Communication         Wireless interface       WiFi 802.11b/g/n, Range: 10.06 m (33 ft)         Data transfer       USB and micro HDMI cable         FlukeConnect™       Save and share images via FlukeConnect™         Instant upload to the cloud       Yes, with FlukeConnect™         General features         Color palettes       Visible light, grayscale or inverted         Internal memory       6 GB         Physical buttons       Intuitive, easy to navigate button technology, 4 functional keys, 4 navigational, one capture or select button         Carrying case       Protective EVA case         Strap       Hand Strap and Neck Strap included         Power adapter       AC adapter/battery charger input         Battery       6400mAh 3.7 volt rechargeable internal li-ion battery         Battery life       3 hours at 50 % LED brightness         Dimensions       17.73 x 22.48 cm (6.98 x 8.85 in)         Weight       0.88 Kg (1.95 lbs)	Refresh rate	30 hz
Wireless interface  WiFi 802.11b/g/n, Range: 10.06 m (33 ft)  Data transfer  USB and micro HDMI cable  FlukeConnect™  Save and share images via FlukeConnect™  Instant upload to the cloud  Yes, with FlukeConnect™  General features  Color palettes  Visible light, grayscale or inverted  Internal memory  6 GB  Physical buttons  Intuitive, easy to navigate button technology, 4 functional keys, 4 navigational, one capture or select button  Carrying case  Protective EVA case  Strap  Hand Strap and Neck Strap included  Power adapter  AC adapter/battery charger input  Battery  6400mAh 3.7 volt rechargeable internal li-ion battery  Battery life  3 hours at 50 % LED brightness  Dimensions  17.73 x 22.48 cm (6.98 x 8.85 in)  Weight	LED backlight	Adjust display brightness for optimal viewing
Data transfer    USB and micro HDMI cable	Communication	
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	Dimensions	17.73 x 22.48 cm (6.98 x 8.85 in)
Consul and wife strong and autom	Weight	0.88 Kg (1.95 lbs)
General specifications and safety	General specifications and	safety
Tablet IP54, dust protected and protected against water projected from a nozzle	Tablet	IP54, dust protected and protected against water projected from a nozzle
Drop test 2 meter (6.56 feet)	Drop test	2 meter (6.56 feet)
Operating temperature 0 °C to 45 °C (32 °F to 113 °F), 50 °C (122 °F) for less than 10 minutes	Operating temperature	0 °C to 45 °C (32 °F to 113 °F), 50 °C (122 °F) for less than 10 minutes

-40 °C to 60 °C (-40 °F to 140 °F)

90 % at 35 °C (95 °F), 75 % at 40 °C (104 °F), 45 % at 50 °C (122 °F)





## **Included Accessories**

Hand strap, neck strap, USB cable, AC power supply/battery charger, TPAK Magnetic Hanger, protective EVA case.

## **Ordering Information**

FLK-DS703 High Resolution Diagnostic Scope



## Fluke ii900 Sonic Leak Detection **Industrial Imager**





Fluke ii900

## A fast, simple way to detect compressed air, steam, gas and vacuum leaks.

Equipped with an array of microphones for an expanded field-of-view, the handheld Fluke ii900 Sonic Industrial Imager enables maintenance teams to quickly and accurately locate air, gas and vacuum leaks in compressed air systems; even in noisy environments

- 17.78 cm (7 in) 1280 × 800 LCD with capacitive touchscreen
- · Frequency band of 2 kHz to 52 kHz (detected 150 ml/min leak at 7 bar for 10 mins)
- SoundMap<sup>™</sup> overlay for visual leak detection
- Capture images in JPEG or PNG format with user input notes function
- Capture videos in MP4 format
- · Manual frequency filtering
- Two-year warranty

## SoundSight™ Technology

Specifically designed for noisy production facilities, new SoundSight™ technology is simple to learn and easy to implement. The 7" LCD touchscreen overlays a SoundMap™ on a visual image for quick leak location identification. The straightforward, intuitive interface allows technicians to isolate the sound frequency of the leak to filter out loud background noise. In a matter of hours, the team can inspect the entire plant during peak operations. For the first time, you can quickly and easily identify the air leak repairs needed to ensure efficient operations and reduce utility bills. Images can be saved and exported for reporting purposes. Never leave air leaks unattended again.

#### With minimal training, the ii900 enables you to:

- · Quickly and easily locate leaks
- Optimize air compressors—delay the capital expense of installing additional compressors
- Ensure proper air pressure to pneumatic equipment
- · Lower energy and gas costs
- · Reduce leak detection time
- Improve reliability of the production line
- Make leak detection part of the typical maintenance routine
- Train the team in a matter of minutes
- Validate repairs on the spot

Key Features	ii900
Sensor	
# of Microphones	64 digital MEMS microphones
Frequency Band	2 kHz to 52 kHz
Sound Pressure Sensitivity	150 ml/min leak at 7 bar from 10 meters
Operational Distance Range	0.5 to 50 meters (1.64 to 164 ft)
Built-in Digital Camera (visible light)	
Field of view	63°± 5°
Focus	Fixed lens
<b>Acoustic Measurements</b>	
Measurement Range	15.4 dB SPL to 115.2 dB SPL $\pm 1$ dB SPL 2 kHz 5.6 dB SPL to 102.5 dB SPL $\pm 2$ dB SPL 19 kHz 28.4 dB SPL to 131.1 dB SPL $\pm 1$ dB SPL 35 kHz 41.8 dB SPL to 133.1 dB SPL $\pm 3$ dB SPL 52 kHz
<b>General Specifications</b>	
Battery Life	6 hours/battery (product includes spare battery)
Ingress Protection (main unit)	IP40 protection against particles 1mm or greater
Sensor Head Rating	IP51 protection against dust and dripping water

## **Try the Virtual Demo**

See sound now. Take a virtual tour of the Fluke ii900 and ii910 Acoustic Imagers.







Fluke Premium Care plans are available for this product. Premium Care plans provide coverage above and beyond your tool's original product warranty. See pages 12 - 13.

## **Ordering Information**

FPC1S-II900-1 Fluke II900 Standard 1 Year

FPC3S-II900-1 Fluke II900

Standard 3 Year

FLUKE-II900/ Fluke ii900 with **FPC** 

Standard 1 Year Bundle

#### **Recommended Accessories**



4500 mAh capacity Li-ion Battery



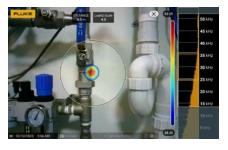
External Battery Charger



FLK-TIX5XX-NECK







## **Included Accessories**

AC Power Supply, Battery Pack Charger, Two Lithium-ion Smart Battery Packs, USB Cable, Rugged, Hard Carrying Case, Two Rubber Array Covers, Adjustable Hand Strap and Neck Strap.

## **Ordering Information**

Fluke-II900

Sonic Industrial **Imager** 

## Fluke ii910 Precision Acoustic Imager







Fluke ii910

## A fast, easy way to detect, locate and analyze partial discharge in one tool.

The ii910 is the all-in-one tool maintenance teams have been waiting for when it comes to leak and partial discharge (PD) issues. Quickly scan the environment and get all the pictures/videos you need with simple one-button capture. No additional tools, equipment or cumbersome cables required. The ii910 Acoustic Imager's ground-breaking technology makes it a cost-efficient, safe, effective, and comfortable tool for teams who inspect and maintain power distribution and industrial high voltage equipment.

- 17.78 cm (7 in) 1280 × 800 LCD with capacitive touchscreen
- Detection range of 0.5 m to 120 m
- Frequency band of 2 kHz to 100 kHz
- SoundMap™ overlay for visual PD detection
- Captures videos in MP4 format
- · Manual frequency filtering
- Two-year warranty

## SoundSight™ Technology for partial discharge detection

Partial Discharge is a very serious issue that you need to be able to monitor quickly and easily. Whether you are inspecting insulators, transformers, switch gears or high voltage powerlines you need to be sure that you spot a problem quickly and early. Partial discharge that goes unchecked can cause blackouts, fires, explosions, or death from arc flashes. In addition to the danger that partial discharge poses to human lives and the environment, there is a significant monetary risk of downtime. Having equipment go down can cost millions of dollars per hour of downtime.

The Fluke ii910 Precision Acoustic Imager is the perfect tool for teams that are constantly inspecting and maintaining power distribution and industrial high voltage equipment. The ii910 provides a safe quick and easy way to detect and locate partial discharge in order to maintain high voltage equipment and prevent catastrophic events. With SoundSight™ technology the ii910 translates the sounds that it hears into a visual representation so that you can quickly locate problem areas. The higher frequency capability of the ii910 allows for earlier detection to facilitate early maintenance planning.

Key Features	ii910
Sensor	
Frequency Band	2 kHz to 100 kHz
Nominal Frame Rate	25 fps
Detection Range	0.5 to 120 m (1.64 to 393.7 ft)
Built-in Digital Camera (	visible light)
Field of View	63° ±5°
Focus	Fixed lens
Display	
Size	22.86 cm (7 in) LCD with backlight, under-sunlight readable
Resolution	1280 × 800 (1,024000 pixels)
Touchscreen	Capacitive
Acoustic Image	Yes, SoundMap™ image
Acoustic Measurements	
Measurement Range	12.1 dB SPL to 114.6 dB SPL ±1 dB SPL 2 kHz 4.4 dB SPL to 101.2 dB SPL ±2 dB SPL 19 kHz 12.8 dB SPL to 119.2 dB SPL ±1 dB SPL 35 kHz 19.8 dB SPL to 116.1 dB SPL ±3 dB SPL 52 kHz 41.4 dB SPL to 129.0 dB SPL ±1 dB SPL 80 kHz 54.4 dB SPL to 135.5 dB SPL ±1 dB SPL 100 kHz
Auto Max/Min dB Gain	Auto or manual, user selectable
Frequency Band Selection	User selectable through user-made pre-sets or manual entry
<b>General Specifications</b>	
Battery Life	6 hours/battery (product includes spare battery)
Main Unit Rating	IP40 protection against particles 1 mm or greater
Weight	2.15 kg (4.74 lbs)
General Safety	IEC 61010-1

Fluke Premium Care plans are available for this product. Premium Care plans provide coverage above and beyond your tool's original product warranty. See pages 12 - 13.

## **Ordering Information**

FPC1S-II900-1 Fluke II900

Standard 1 Year

FPC3S-II900-1 Fluke II900

Standard 3 Year

FLUKE-II900/ **FPC** 

Fluke ii900 with Standard

1 Year Bundle

#### **Recommended Accessories**





RP291

ERC290 External Battery Charger





FLK-TIX5XX-NECK

CXT1000 Hard Carry Case





## **Included Accessories**

AC Power Supply, Battery Pack Charger, Two Lithium-ion Smart Battery Packs, USB Cable, Rugged Hard Carrying Case, Two Rubber Array Covers, Adjustable Hand and Neck Strap.

#### **Ordering Information**

Fluke-II910 Precision **Acoustic Imager** 

