TECHNICAL DATA

Fluke ii915, ii905, and ii500 Acoustic Imagers

SOUNDSIGHT™ TECHNOLOGY

ACOUSTIC IMAGING
Blended live SoundMap™ with visual image

DISPLAY
7-inch 1280 x 800 LCD with capacitive touchscreen

LEAKQ™ MODE
Leak quantification: on-device estimated leak size and cost indications

MECQ™ MODE
Mechanical inspection: on-device feature to detect and document mechanical issues, available on ii915

PDQ MODE™
Partial discharge: on-device PD classification, available on ii915

SoundSight™ refers to the Fluke technology of converting sound waves to a visual image.

The all-in-one tool you have been looking for to visualize leaks, partial discharge, and mechanical issues.

Leaks: Hidden Costs Due to Leaks in Compressed Air, Gas, Steam, and Vacuum Systems.

While most manufacturers know these leaks exist, addressing them has been time-consuming and tedious. With the Fluke ii-series and minimal training, your maintenance technicians can begin checking for leaks during their typical maintenance routine—even during peak operation hours. The ii-series acoustic imagers let technicians see sound as they scan hoses, fittings, and connections for leaks. Its built-in acoustic array of tiny sensitive microphones generates a spectrum of decibel levels per frequency. Based on this output, an algorithm calculates a sound image, known as SoundMap™, that is superimposed on a visual image. The SoundMap is automatically adapted depending on the frequency level selected so that background noise is filtered out, making it incredibly simple to detect compressed gas leaks.

Mechanical: First-Line Inspection to Locate Potential Mechanical Issues Early and Avoid Unplanned Downtime

Conveyor systems, with their vast size and intricate components, often pose a maintenance challenge, threatening to disrupt production and cause unplanned downtime. The Fluke ii915 with MecQ™, a game-changer in the field, enables efficient scanning of large areas, detecting and documenting potential issues for more targeted maintenance. With its contactless scanning and advanced noise filtering, the Fluke ii915 Acoustic Imager with MecQ™ Mode ensures safety and delivers clear images even in high-noise environments. By detecting areas of concern early on, it instills confidence in its users, enabling proactive measures to prevent costly problems, surpassing traditional methods. For professionals seeking to ensure seamless operation of large conveyance systems, the Fluke ii915 Acoustic Imager with MecQ™ is the ultimate choice.

Partial Discharge: The Invisible Threat... Now You Can See

Partial discharge, a serious issue that can lead to arc flash fires, blackouts, explosions, and danger to life, is now a visible threat. Whether you are inspecting insulators, transformers, switch gears, or high-voltage powerlines, the Fluke ii915 Acoustic Imager with PDQ Mode™ is your proactive tool. This tool, designed for high-voltage electricians, electrical test engineers, and grid maintenance teams, translates the sound of partial discharge into visuals that pinpoint the location. With an extended frequency range of 2-100 Khz, the ii915 enables early detection of potential problems, empowering you to plan maintenance and prevent catastrophic events.

	ii500	ii905	ii915
LeakQ™	Scale (1-10)	Leak size scale, leak rate, and leak cost estimation	Leak size scale, leak rate, and leak cost estimation
PDQ™			•
MecQ™			•
Wifi		•	•
Frequency	2 to 52 kHz	2 to 65 kHz	2 to 100 kHz
Detection Range	Up to 50 meters (164 feet)*	Up to 70 meters (230 feet)*	Up to 120 meters (393 feet)*
Resolution	0.3 MP	5.0 MP	5.0 MP
Battery Life	6 hours	6 hours	6 hours
Memory	20 GB	32 GB	32 GB
Tripod Connector		•	•

*Depending on ambient conditions

Large 7” touch screen
High resolution 7” capacitive, full color touch screen, supports interaction with interface menu.

Operating time
Stay powered all day with six hours of operating time

One button capture image
Capture images on-the-go with one click, no need to navigate the menu for image capture

Intuitive user interface
Easy to use with minimal training.

- Features supporting common workflows
- Unique customizable frequency band filter
- On-device real time data
- Customizable profiles for different inspection types

Ergonomic to use
Adjustable hand strap and adjustable neck strap

Tripod connector
ii915 and ii905 models come with standard ¼”-20 UNC threaded hole for easy tripod mounting and clear images or video

Annotate and tag
Tag your inspections by adding photo notes, asset identifiers, text notes, and follow-up actions, including priority. Use QR codes to easily identify your inspections. No hassle or errors with seamless integration using the FlukeConnect™ desktop software.

Reduce the frustration of unplanned downtime in four easy steps

1. Locate
Quickly and easily scan areas and pinpoint where unusual sounds are coming from – even those sounds out of range for human hearing.

2. Document
Take a screenshot of the point of interest. Then annotate and tag the photo to define follow-up action and urgency.

3. Share
Share the annotated screenshots with your team so they can respond and schedule maintenance.

4. Repair
Investigate the pinpointed areas further during planned downtime to determine what the problem is and proactively fix it.

FLUKE®

Specifications

Key Features	ii500	ii905	ii915
Sensors			
Frequency band	2 kHz to 52 kHz	2 kHz to 65 kHz	2 kHz to 100 kHz 2 kHz to 52 kHz
Detection range[1]	0.5 to > 50 meters (1.6 to > 164 feet)	0.5 to > 70 meters (1.6 to > 230 feet)	0.5 to > 120 meters (1.6 to > 393 feet)
Field of view (FOV)	63°± 5°		
Nominal frame rate	25 FPS		
Built-in digital camera (visible light)			
Field of view (FOV)	63°± 5°		
Focus	Fixed lens		
Zoom	No zoom	3 x digital zoom	
Resolution	0.3 MP	5 MP	
Display			
Size	7" LCD with backlight, sunlight readable		
Resolution	1280 x 800 (1,024,000 pixels)		
Touchscreen	Capacitive		
Acoustic image	SoundMap™ image		
Image storage			
Storage capacity	20 GB (> 5,000 pictures / > 999 videos)	32 GB (> 8,000 pictures / > 1,600 videos)	
Image format	Blended visual and SoundMap™ .JPG or .PNG		
Video format	Blended visual and SoundMap™ .MP4		
Video length	Up to 5 minutes		
Digital export	USB-C for data transfer		
Acoustic measurements			
Measurement range (typical)	15.4 to 115.2 dB SPL (± 1 dB SPL 2 kHz) 5.6 to 102.5 dB SPL (± 2 dB SPL 19 kHz) 28.4 to 131.1 dB SPL (± 1 dB SPL 35 kHz) 41.8 to 133.1 dB SPL (± 3 dB SPL 52 kHz)	15.4 to 115.2 dB SPL (± 1 dB SPL 2 kHz) 5.6 to 102.5 dB SPL (± 2 dB SPL 19 kHz) 28.4 to 131.1 dB SPL (± 1 dB SPL 35 kHz) 41.8 to 133.1 dB SPL (± 3 dB SPL 52 kHz)	12.1 to 114.6 dB SPL (± 1 dB SPL 2 kHz) 4.4 to 101.2 dB SPL (± 2 dB SPL 19 kHz) 12.8 to 119.2 dB SPL (± 1 dB SPL 35 kHz) 19.8 to 116.1 dB SPL (± 3 dB SPL 52 kHz) 41.4 to 129.0 dB SPL (± 1 dB SPL 80 kHz) 54.4 to 135.5 dB SPL (± 1 dB SPL 100 kHz)
Classification and quantification			
LeakQ™	Leak size scale (1-10)	Leak size scale, Leak rate, and Leak cost estimation	
PDQ Mode™	–	–	Partial discharge type classification
MecQ™	–	–	Mechanical anomaly detection
Auto max/min dB gain	Auto	Auto or manual, user selectable	
Frequency band selection	User selectable through user-made presets or manual entry		
Battery			
Battery	Rechargeable and field replaceable Li-ion battery		
Battery life	6 hours		
Battery charging time	~3,5 hours		
Battery charging system	External (Bay charger)	Internal (USB-C)	

[1] Depending on ambient conditions

Key Features	ii500	ii905	ii915
Software			
Ease of use	Intuitive user interface		
Acoustics: Show dB scale	On/Off		
Acoustics: Min/Max dB	Manual/Auto		
Acoustics: Profiles	–	Preset capture profiles	
Acoustics: High frequency	–		Yes
Acoustics: Multiple sources	Single source	Show single or multiple sources	
Palette: Colors	3: Grayscale, Ironbow, and Blue-Red		
Palette: Overly transparency	Yes: 1-100 %		
Grayscale mode	Yes		
Centerpoint markers	On/Off		
Trend graphs	Frequency and dB scale		
Spotmarkers	dB level reading at center point of image		
Leak values	LeakQ™ scale (1-10)[2]	Leak costs, Leak volume, LeakQ™ scale (1-10)[2]	
Master admin menu	–	Yes	
Annotation	Asset name; Asset ID; Asset type; Leak type; Gas type; Pressure		
Photo notes	Up to 4 photos notes for reference		
Asset inspection status	–	'As left', 'As found', 'Undetermined'	
Asset ID	Text input and automatic QR code based asset ID identification		
Actions annotation	–	Action requirements, Action priority level, Action notes	
Other	–	Operating conditions, Weather notes	
General specifications			
Tripod holder / connector	–	Yes: 1/4"-20	
USB	1 x USB-C	2 x USB-C	
Wireless	–	Wifi	
Operating Temperature	-10 to 45 °C (14 to 113 °F)	-10 to 40 °C (14 to 104 °F)	-10 to 45 °C (14 to 113 °F)
Storage Temperature	-20 to 70 °C (-4 to 158 °F) without batteries installed		
Relative humidity	10 to 95 % non-condensing		
Size (H x W x L)	186 mm x 322 mm x 68 mm (7.3 inches x 12.7 inches x 2.7 inches)		
Weight (battery included)	2.1 kg (4.6 pounds)	2.0 kg (4.4 pounds)	
Ingress Protection (IP)	IP40		
Warranty	2 year		
Fluke Premium Care	Premium Care Standard[3]		
Self-diagnostic notification	Array-health test to identify when microphone array needs attention		
Supported languages	Dutch, English, Finish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Simplified Chinese, Spanish, Swedish, Traditional Chinese		
RoHS compliant	Yes		
Safety			
General safety	IEC 61010-1		
Electromagnetic Compatibility (EMC) International	IEC 61326-1: Portable Electromagnetic Environment IEC 61326-2-2 CISPR 11: Group 1, Class A		
Korea (KCC)	Class A Equipment (Industrial Broadcasting and Communication)		
USA (FCC)	47 CFR 15 sub part B. This product is considered an exempt device per clause 15.103		

[2] 1-10 Scale (independent of Leak Type)
[3] Subject to regional availability (www.fluke.com/premiumcare)

Ordering information

FLK-ii500 Acoustic Imager

FLK-ii905 Acoustic Imager

FLK-ii915 Acoustic Imager

Included

Acoustic Imager; Power supply*; Lithium-ion smart battery pack; USB-C cable; Rugged hard carrying case; Array sensor cover; Adjustable hand strap, and adjustable neck strap.

* ii500 includes a battery charging bay.

Visit **fluke.com** to get complete details on these products or ask your local Fluke sales representative.

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