

FLUKE®

Stay Ahead of Unplanned Downtime

with Fluke ii500, ii905, and ii915
Acoustic Imagers

Fast, easy, early detection
of compressed gas leaks,
partial discharge, and
mechanical anomalies, all
of which can be completed
during normal operating
hours over a large area
quickly.



Why Do You Need a Fluke Acoustic Imager?

Fluke acoustic imagers give you the power to see sound, transforming the way industrial inspections are carried out. Whether it's compressed air or gas leaks, partial discharge issues, or mechanical anomalies, Fluke gives you the tools to improve the bottom line through easy and fast inspections that boost efficiency, maximize uptime, reduce costs, and improve safety.

Not only do Fluke acoustic imagers detect and pinpoint the location of potential issues, but they also offer further analysis and assessment through advanced modes such as **LeakQ**, **PDQ**, and **MecQ**.



Maximize Uptime

- Reduce the risk of unplanned downtime by swiftly identifying leaks in compressed air or gas systems for timely repair.
- Identify potential electrical discharge or mechanical issues early to give time to address and, therefore, prevent unplanned downtime
- Reduce Mean-Time-to-Repair (MTTR), a key performance indicator (KPI)



Reduce Costs

- Research has shown a plant with compressed air can waste up to 30% of its total compressed air production through leaks. Find the leaks, reduce waste, and save money.
- The potential cost of downtime in conveyor systems is \$30,000 to \$130,000 per hour, depending on the industry



Ensure Team Safety

- Conduct inspections without the need for close contact
- Eliminate hazardous situations for your team



Deploy with Ease

- Intuitive interface that encourages adoption by the entire maintenance team
- Seamless integration with existing leak and partial discharge detection tools for convenient visual detection



Build Maintenance Efficiency

- Efficiently scan large areas of interest
- Stay ahead of issues and order spare parts promptly
- Pinpoint the exact source of problems rather than just the general area
- Optimize energy efficiency by addressing unhealthy bearings that increase energy consumption
- Mitigate consequential damages by taking proactive measures

Perform acoustic analysis and assessment with advanced modes **LeakQ**, **PDQ**, and **MecQ**.



LeakQ



PDQ



MecQ

How Does Acoustic Imaging Work?

Fluke Acoustic Imagers are sound cameras that use an array of 64 micro-electronic surface-mount microphones to capture sound waves emanating from an object.

With advanced electronics and software algorithms, sound signals are converted into an image and overlaid onto a visual image—(**SoundMap™**)—on the 7-inch, 1280 x 800-pixel LCD touchscreen. Acoustic imaging accurately pinpoints the direction of sound waves in a wide range of frequencies, such as those from compressed air system leaks or partial discharge. Compressor system leaks typically emit sound from 30 to 60 kHz, and partial discharges (electrical leaks) typically emit sound from 20 to 110 kHz. Because the frequency of sound emitted from mechanical issues can exhibit many different frequencies and change with time, the ii915 includes an expanded frequency range of 2–100 kHz to give the earliest possible detection.

Microphones capture sound waves and then convert them into a **SoundMap™**.



8 Reasons to Choose Fluke Acoustic Imaging

- 1 **Intuitive user interface**
Quick, easy, and intuitive user interface with everything you need right at your fingertips—get going in about 5 minutes.
- 2 **Large 7" touch screen**
A high-resolution 7" capacitive, full-color touch screen with outstanding view ability, supports interaction with interface menu.
- 3 **One button capture image**
Capture images on the go with one click; there is no need to navigate the menu for image capture.
- 4 **LeakQ™ Mode**
The LeakQ™ Mode is an analytical and reporting tool designed to estimate the volume and costs of individual leaks on the go. It performs automatic scans, capturing the frequency range and sound pattern of leaks up to 100 kHz. *Accurate distance measurement enhances leakage estimation, providing the best estimations of leak size and losses in its class. Additionally, it offers integrated CO2 emission estimation reporting, helping prioritize which leaks deserve attention first.
- 5 **MecQ™ Mode**
The MecQ™ Mode of the ii915 surpasses traditional ultrasonic tools with new, user-friendly sub-modes. Unlike single-frequency tools, MecQ offers predefined and customizable frequency bands, allowing filtering and trending of dB-level data at any frequency band. This enables powerful trend analysis while still pinpointing leak locations.
- 6 **PDQ Mode™**
The Fluke ii915 translates the sound emitted by partial discharge into visuals, precisely pinpointing their location. With an extended frequency range of 2-100 kHz, it detects partial discharge early, aiding maintenance planning and preventing catastrophic events. High-voltage professionals can now visualize what was once invisible.
- 7 **Annotate and tag**
Tag your inspections by adding photo notes, asset identifiers, text notes, and annotation of follow-up actions, including priority. Use QR codes to identify your inspections easily. No hassle or errors with seamless integration using the FlukeConnect™ desktop software.
- 8 **Operating time**
Stay powered all day with six hours of operating time.

*Features vary by models

Quick, easy, and intuitive user interface

- | | | |
|-----------------------|-------------------------------|----------------------------|
| a Tool menu | e Palette of dB Scale | i Battery status/date/time |
| b Leak quantification | f Frequency range of spectrum | j Folder selection |
| c dB at source | g One button capture image | k Inspection profile |
| d Distance indication | h Power button | l Annotate and tag |



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.

Model Comparison



	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™			•
Features			
Wi-Fi		•	•
Frequency	2 to 52 kHz	2 to 65 kHz	2 to 100 kHz
Detection range	Up to 50 m (164 ft)*	Up to 70 m (230 ft)*	Up to 120 meters (393 ft)*
Visual Camera Resolution	0.3 MP	5.0 MP	5.0 MP
Battery life	6 hours	6 hours	6 hours
Memory	20 GB (> 5000 pictures / > 999 videos)	32 GB (> 8000 pictures / > 1600 videos)	32 GB (> 8000 pictures / > 1600 videos)
Tripod connector		•	•

*Depending on ambient conditions

Fluke Built, Fluke Protected

Reduce unplanned expenses and get the most out of your tools with Fluke Premium Care

When you invest in the best equipment in the industry, you want your money to go as far as possible. Fluke Premium Care provides coverage above and beyond your tool's original product warranty, so you don't need to worry about unexpected downtime caused by damaged test equipment, accessories, or tools in need of calibration or repair.

Fluke Premium Care Standard is available with one-year or three-year plan options so you can choose the plan that is right for you.

	Standard Warranty	Premium Care Standard
Repair manufacturing defects	✓	✓
Accidental damage and repair		✓
Replacement of damaged accessories		✓
Annual calibration or performance check		✓
Expedited calibration and repair		✓
Priority tech support		✓
Software updates		✓
Expedited shipping		✓



PremiumCare

Uptime Protection by **FLUKE**



Repair manufacturing defects

Ensuring that your equipment functions as intended maintains accuracy and reliability, thereby reducing downtime and ensuring the longevity of your Fluke product.



Accidental damage and repair

Avoid costly repairs and rest easy knowing your test tool is covered in the event it gets damaged.



Replacement of damaged accessories

Accessories that originally shipped with your unit, like batteries, power adapters, probes and cables, and have been qualified as defective by our technicians will be replaced, free of charge.



Annual calibration or performance check

Ensure your test tool is providing accurate results and adheres to the recommended maintenance schedule by leaving it in the hands of our experts.



Expedited calibration and repair

Your calibration or repair will be expedited with priority next-on-bench service and shipping so you can get back to your work faster.



Expedited shipping

Accelerates the shipping process, reducing the time your equipment spends in transit, while minimizing the overall turnaround time to ensure that your Fluke product is back in your hands and operational as quickly as possible.



Software updates

Maintain peak performance with firmware updates that ensure your tool remains reliable and up to date, automatically applied during equipment calibration.



Priority tech support

Ensures prompt assistance and resolution of technical issues, minimizing downtime by quickly addressing any problems or concerns with your Fluke equipment.

Fluke Premium Care Standard is Subject to regional availability
Learn more about Fluke Premium Care www.fluke.com/premiumcare

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up and running.™

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