

**TECHNICAL DATA** 

# Fluke ii900 Sonic Industrial Imager





## SOUNDSIGHT™ TECHNOLOGY

ACOUSTIC IMAGING

Blended live SoundMap<sup>™</sup> with visual image **SENSITIVITY** 

Detects 0.005 CFM leak at 100PSI from up to 32.8 feet\*

**FREQUENCY RANGE** from 2kHz to 52kHz

#### **MAXIMUM OPERATING DISTANCE** Up to 164 feet (50 meters)\*

#### DISPLAY

7 inch 1280 x 800 LCD with capacitive touchscreen

 ${\tt SoundSight}^{\tt M}$  refers to the Fluke technology of converting sound waves to a visual image.

\*Depending on ambient conditions

## Leaks in compressed air, gas and vacuum systems hit both production uptime and the operations bottom line.

While this is a known issue, locating air leaks has been a time-consuming and tedious-until now. With the Fluke ii900 Sonic Industrial Imager your maintenance team can quickly pinpoint the location of compressed air and vacuum leaks. With minimal training, your maintenance technicians can begin checking for air leaks during their typical maintenance routine-even during peak operation hours.

This industrial imager offers a new way to locate issues using sound. It is an intuitive, simple to use tool that can isolate the frequency of leaks or vacuums, even in extremely noisy production environments. A leak location is determined by discerning the direction from which a sound originates by the time delays that occur as the sound passes over an array of microphones. A SoundMap<sup>™</sup> is displayed in color over a visual image allowing for easy visual location. With the full array of microphones, it is easy to scan a large area and even capture leaks from a distance.

Finally a better way, quick, simple compressed air, gas and vacuum leak identification.

- Do more with the same air compressors-delay the capital expense of installing an additional compressor
- Ensure proper air pressure to your pneumatic equipment
- Lower energy costs
- Reduce leak detection time
- Improve reliability in your production line
- Make leak detection part of your typical maintenance routine
- Train the team in a matter of minutes
- Validate repairs on the spot



## **Specifications**

|  | Fluke ii900 Sonic Industrial Imager  | Definitions   |
|--|--|---|
| Sensors  |  |   |
| # of microphones                                     | 64 digital MEMS microphones  | Micro-Electro-Mechanical Systems, or MEMS refers<br>to miniaturized mechanical and electro-mechanica<br>elements                            |
| Frequency band                                       | 2 kHz to 52 kHz  |   |
| Sound pressure sensitivity                           | Detects a 0.005 CFM leak at 100PSI from up to 32.8 feet (10 meters)*   |   |
| Operation distance range                             | 0.5 to > 50 meters (0.16 to > 164 feet)  |   |
| Field of view  | 65 ° ± 3 °   |   |
| Minimum frame rate                                   | 25 FPS   | The number of Frames Per Second (FPS) indicates<br>the number of times the images on the screen is<br>refreshed each second                 |
| Built-in digital camera (visible light)              |  |   |
| Pield of view (FOV)                                  | 65 ° ± 3 °   |   |
| Focus  | Fixed lens   |   |
| Display  | 7" LCD with backlight, under-sunlight readable   |   |
| Resolution   | 1280 x 800 (1,024,000 pixels)  |   |
| Fouchscreen  | Capacitive   | Extremely precise and quick responding  |
| a coustis image                                      | Vog CoundMan <sup>M</sup> tophnology   | SoundMap™ is a visual map of noise sources using  |
| Acoustic image                                       | Yes, SoundMap™ technology  | an acoustical array   |
| mage storage   |  |   |
| storage capacity                                     | Internal memory with the capacity for 999 picture files or 20 video files  |   |
| mage format  | Blended visual and SoundMap™.JPG or .PNG   |   |
| /ideo format   | Blended visual and SoundMap™.MP4   |   |
| /ideo length   | 30 seconds   |   |
| Digital export                                       | USB-C compatible for data transfer   |   |
| Acoustic measurements                                |  |   |
| Measurement range                                    | 29.7 dB to 120 dB SPL at 2kHz<br>16 dB to 106.3 dB SPL (± 1 dB) at 19 kHz<br>21.4 dB to 117 dB SPL (± 1 dB) at 52 kHz  | Sound pressure level (dB SPL) or acoustic pressure<br>is the local pressure deviation from the ambient-<br>decible and sound pressure level |
| Auto max/min dB gain                                 | Auto or manual, user selectable  | decible and sound pressure level  |
| Frequency band selection                             | User selectable through user-made presets or manual entry  |   |
| Software   | user selectable through user made presets of manual entry  |   |
|  | Tetritive user interface   |   |
| Ease of use  | Intuitive user interface   |   |
| Frend graphs<br>Spot markers                         | Frequency and dB scale<br>dB level reading at center point of the image  |   |
| Battery  | ub level reading at center point of the image  |   |
|  | Deckergechie Li ion Phyle DD201  |   |
| Batteries (field-replaceable, rechargeable)          | Rechargeable Li-ion, Fluke BP291   |   |
| Battery life   | ≥2 hours (product includes spare battery)  |   |
| Battery charging time                                | 3 hours  |   |
| Battery charging system                              | External dual-bay charger, EDBC 290  |   |
| General specifications<br>Standard palettes          | 4: Grayscale, Ironbow, Blue-Red and Stepwise Blue  |   |
| Operating Temperature                                | 0 °C to 35 °C ( 32 °F to 95 °F)  |   |
| Storage Temperature                                  | -20 °C to 70 °C (-4 °F to 158 °F)  |   |
| Relative humidity                                    | 10 % to 95 % non-condensing  |   |
| Size (H x W x L)                                     | 186 mm x 322 mm x 68 mm ()   |   |
| Neight (battery included)                            | 1.7 kg (3.75 pounds)   |   |
| Main unit rating                                     | IP40 protection against particles 1mm or greater and dripping water  |   |
| Sensor head rating                                   | IP40 protection against particles finite of greater and unipping water   |   |
| Warranty   | 2 year   |   |
| Self-diagnostic notification                         | Array-health test to identify when microphone array needs attention  |   |
| Supported languages                                  | Dutch, English, Finish, French, German, Italian, Japanese, Korean, Polish,<br>Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese |   |
| RoHS compliant                                       | Yes  |   |
| Safety   |  | ·   |
| General Safety                                       | IEC 61010-1  |   |
| Electromagnetic Compatibility (EMC)<br>International | IEC 61326-1: Portable Electromagnetic Environment IEC 61326-2-2<br>CISPR 11: Group 1, Class A  |   |
| Korea (KCC)  | Class A Equipment (Industrial Broadcasting and Communication)  |   |
| USA (FCC)  | 47 CFR 15 subpart B. This product is considered an exempt device per clause  | 1   |

\*Depending on ambient conditions





## **Ordering information**

FLK-ii900 Sonic Industrial Imager

#### Included

Imager; AC power supply and battery pack charger (including universal AC adapters); two rugged lithium ion smart battery packs; USB cable; rugged, hard carrying case; two rubber array covers; adjustable hand strap and adjustable neck strap.

Visit your local Fluke website or contact your local Fluke representative for more information.





Images taken with the ii900 Sonic Industrial Imager in an industrial environment.

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

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