

TECHNICAL DATA

Fluke ii900 Sonic Industrial Imager



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™ 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

SOUNDSIGHT™ TECHNOLOGY

ACOUSTIC IMAGING

Blended live SoundMap™ 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

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

*Depending on ambient conditions

Specifications

Fluke ii900 Sonic Industrial Imager		Definitions
Sensors		
# of microphones	64 digital MEMS microphones	Micro-Electro-Mechanical Systems, or MEMS refers to miniaturized mechanical and electro-mechanical 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* (Detects a 2.5 cm ³ /sec leak at 7 bar from up to 10 meters)	
Operation distance range	0.5 to > 50 meters (1.6 to > 164 feet)	
Field of view	63°± 5°	
Minimum frame rate	12.5 FPS	The number of Frames Per Second (FPS) indicates the number of times the images on the screen is refreshed each second
Built-in digital camera (visible light)		
Field of view (FOV)	63°± 5°	
Focus	Fixed lens	
Display 7" LCD with backlight, under-sunlight readable		
Resolution	1280 x 800 (1,024,000 pixels)	
Touchscreen	Capacitive	Extremely precise and quick responding
Acoustic image	Yes, SoundMap™ image	SoundMap™ is a visual map of noise sources using an acoustical array
Image storage		
Storage capacity	Internal memory with the capacity for 999 picture files and 20 video files	
Image format	Blended visual and SoundMap™.JPG or .PNG	
Video format	Blended visual and SoundMap™.MP4	
Video length	30 seconds	
Digital export	USB-C for data transfer	
Acoustic measurements		
Measurement range	29.7 dB to 120 dB SPL at 2kHz 16 dB to 106.3 dB SPL (± 1 dB) at 19 kHz 21.4 dB to 117 dB SPL (± 1 dB) at 52 kHz	Sound pressure level (dB SPL) or acoustic pressure is the local pressure deviation from the ambient-decible and sound pressure level
Auto max/min dB gain	Auto or manual, user selectable	
Frequency band selection	User selectable through user-made presets or manual entry	
Software		
Ease of use	Intuitive user interface	
Trend graphs	Frequency and dB scale	
Spot markers	dB level reading at center point of the image	
Battery		
Batteries (field-replaceable, rechargeable)	Rechargeable Li-ion, Fluke BP291	
Battery life	6 hours (product includes spare battery)	
Battery charging time	3 hours	
Battery charging system	External dual-bay charger, EDBC 290	
General specifications		
Standard palettes	3: Grayscale, Ironbow and Blue-Red	
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 ()	
Weight (battery included)	1.7 kg (3.75 pounds)	
Main unit rating	IP40 protection against particles 1mm or greater and dripping water	
Sensor head rating	IP51	
Warranty	2 year	
Self-diagnostic notification	Array-health test to identify when microphone array needs attention	
Supported languages	Dutch, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, 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 subpart B. This product is considered an exempt device per clause 15.103	

*Depending on ambient conditions



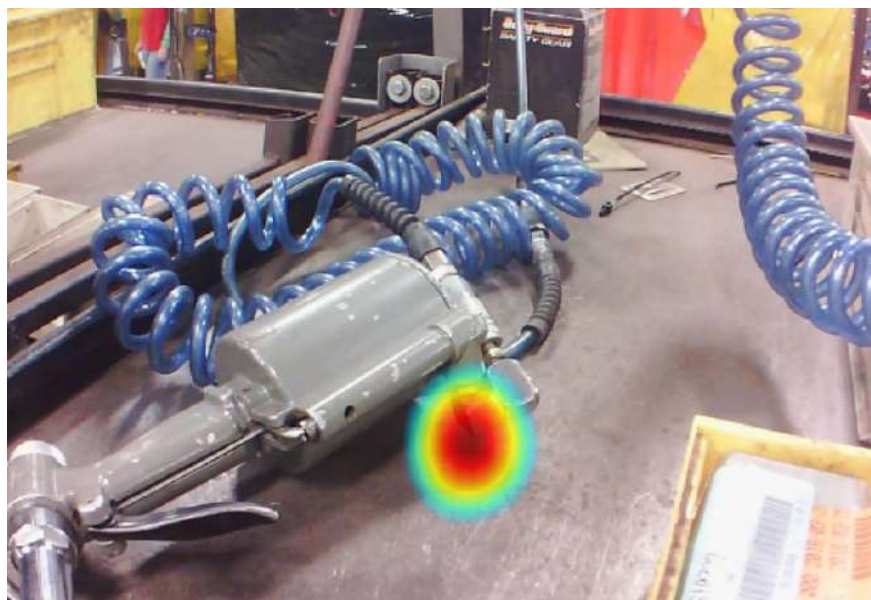
Ordering information

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.®*

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

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

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

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>

©2019 Fluke Corporation.
Specifications subject to change without notice.
3/2019 6012097b-en