TECHNICAL DATA

Fluke ii900 Sonic Industrial Imager





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

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

While this is a known issue, locating leaks has been time-consuming and tedious—until now. With the Fluke ii900 and minimal training, your maintenance technicians can begin checking for leaks during their typical maintenance routine—even during peak operation hours.

The ii900 Sonic Industrial Imager lets 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.

Finally a better way, quick, simple compressed air, gas, steam 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 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 image on the screen is refreshed each second
Built–in digital camera (visible light)		
Field of view (FOV)	63°± 5°	
Focus	Fixed lens	
Display		
Size	7" LCD with backlight, sunlight readable	
Resolution	1280 x 800 (1,024,000 pixels)	
Touchscreen	Capacitive	Extremely precise and quick responding
Acoustic image	Yes, SoundMap™ image	A 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	29.3 dB to 119.6 dB SPL (±2 dB) at 2 kHz 21.9 dB to 112.2 dB SPL (±2 dB) at 19 kHz 36.6 dB to 126.9 dB SPL (±2 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 40 °C (32 °F to 104 °F)	
Storage Temperature	–20 °C to 70 °C (–4 °F 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)	1.7 kg (3.75 pounds)	
Main unit rating	IP40	Protection against particles 1 mm or greater and dripping water
Sensor head rating	IP51	Limited protection against dust ingress
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, 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



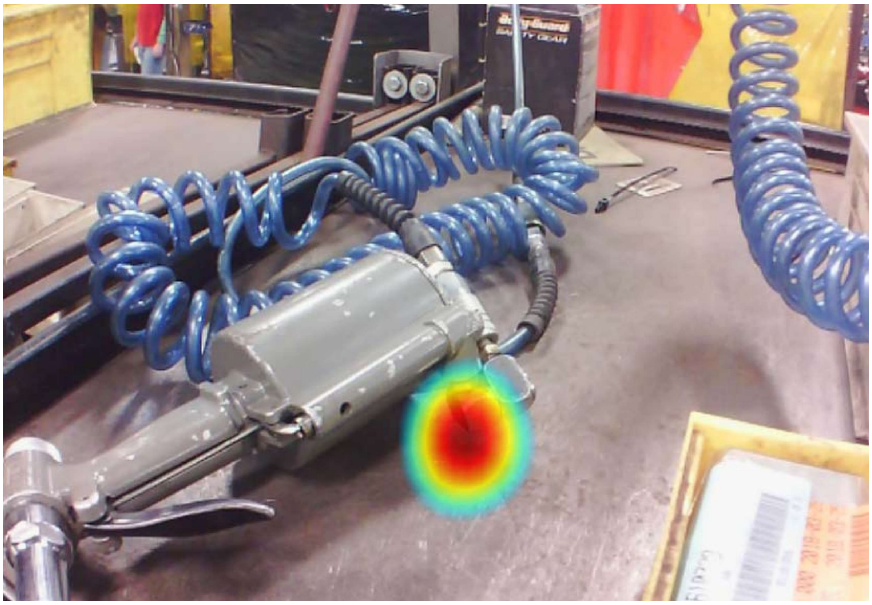
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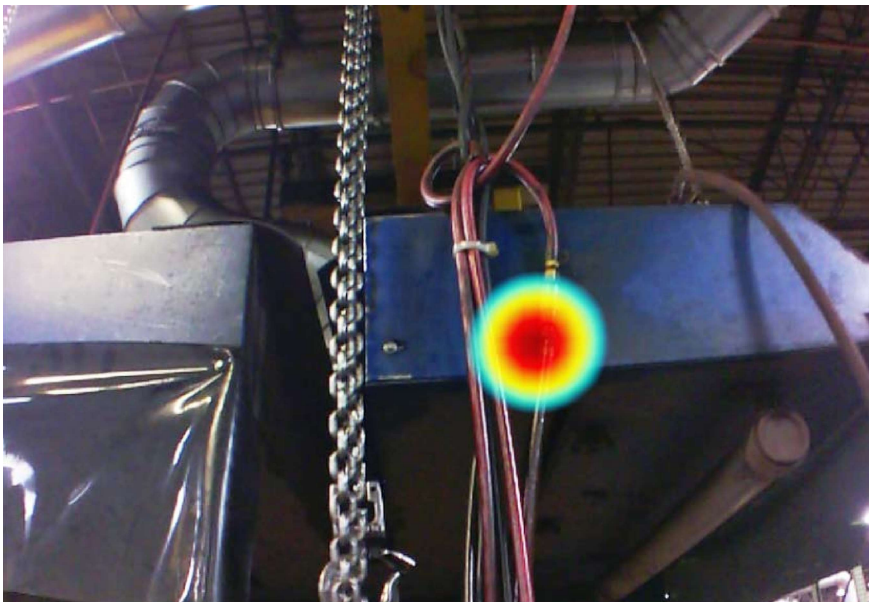
FLK-ii900 Sonic Industrial Imager

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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