

**FLUKE®**

# **ii900**

Sonic Industrial Imager

## Product Specifications

April 2019 Rev. A

© 2019 Fluke Corporation. All rights reserved. Specifications are subject to change without notice.  
All product names are trademarks of their respective companies.

## Specifications

### Acoustic Sensing and Imaging

Number of Microphones.....	64 digital MEMS
Frequency Range .....	2 kHz to 52 kHz
Sound Pressure Sensitivity .....	Detects 0.005 CFM leak @ 100 psi up to 33 ft distance (2.5 cm <sup>3</sup> /s leak @ 7 bar up to 10 m distance) (depending on ambient conditions)
Operation Distance .....	0.5 m to 50 m (depending on ambient conditions)
Field-of-View (FOV) .....	63 ° ±5 °
Minimum Frame Rate .....	12.5 FPS

### Visual Camera

Resolution on Screen.....	1030 x 800
Field of View (FOV) .....	63 ° ±5 °
Focus .....	Fixed lens

### Display

Display.....	7" LCD with backlight, under-sunlight readable
Resolution .....	1280 x 800
Touchscreen.....	Capacitive
Acoustic Image .....	Yes, SoundMap™ image overlaps with visual image

### Image Storage

Memory/Storage Capacity .....	999 picture files and 20 video files
Image Format .....	Blended Visual and SoundMap™ image .JPEG or .PNG (JPEG by default)
Video Format .....	Blended Visual and SoundMap™ image
Save Video .....	30 seconds

### Acoustic Measurement and Analysis

Measurement Range at Sensor .....	29.3 dB to 119.6 dB SPL (±2 dB) @ 2 kHz 21.9 dB to 112.2 dB SPL (±2 dB) @ 19 kHz 36.6 dB to 126.9 dB SPL (±2 dB) @ 52 kHz
Auto Max/Min dB Gain .....	Auto or manual. User selectable.
Frequency-Band Selection.....	User selectable

### Communication Interface and Buttons

USB.....	USB-C used to transfer data to PC, download image using standard USB Mass Storage device driver.
Buttons .....	Power on/off, image/video capture

### Self-Diagnostic

Type .....	Array-health Self-diagnostic warning to identify when too many microphones are faulty. Self-diagnostic periodically runs and shows a warning when service is recommended.
------------	--

**Mechanical**

Size without Handstrap (H x W x L) .....	186 mm x 322 mm x 68 mm
Weight .....	1.7 kg
Sensor-Head Ingress Protection .....	IP51
Main Unit Ingress Protection .....	IP40

**Power Supply**

Battery Type .....	Rechargeable Li-ion, BP291
Certifications .....	CB report to IEC62133, and UN38.3 Certification
Battery Life .....	6 hours (Product includes spare battery)
Charging Method .....	External dual-bay charger, EDBC 290
Charging Hours .....	3 hours
Charge Operating Temperature .....	0 °C to 45 °C

**Environmental**

## Temperature

Operating .....	0 °C to 40 °C
Storage without battery .....	-20 °C to 70 °C
Storage with battery .....	-20 °C to 60 °C
Battery charging .....	0 °C to 45 °C

## Altitude

Operating .....	2000 m
Storage .....	12 000 m

Humidity ..... 10 % to 95 % non-condensing

**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
---------------------	--

*Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.*

*Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.*

*Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.*

*Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.*

Korea (KCC) ..... Class A Equipment (Industrial Broadcasting & Communication Equipment)

*Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.*

USA (FCC) ..... 47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.