

Sorama CAM iV64s

SORAMA PRODUCT SPECIFICATION SHEET DECEMBER 2024 V.1

The Sorama CAM iV64s is a compact, intuitive acoustic camera that enables swift and precise detection of audible and ultrasonic leaks, from gas and compressed air leaks, to mechanical inspection and partial discharge detection. Its lightweight design, real-time visualization, and weather-independent functionality make it versatile across various industries.

Designed for straightforward operation, the Sorama CAM iV64s offers preset modes like leak inspection and airtightness. The camera offers connectivity for instant data transfer, allowing real-time capture and sharing of sound images.

- ▶ Realtime spectrum
- ▶ Far-field sound source localization and visualization

Available packages

- ▶ Leak inspection
- ▶ Partial discharge inspection
- ▶ Mechanical inspection
- ▶ Airtightness inspection
- ▶ Buildings inspection



Sorama CAM iV64s

INVENTORY

Sorama CAM iV64s	1
Handstrap	1
Neckstrap	1
Waterproof travel case	1
Smart battery	2
Battery charger	1
USB-C Cable	1



Sorama CAM iV64s

PHYSICAL PROPERTIES

Size	170 x 350 x 157 mm 6.7 x 13.8 x 6.2 inch	L x W x D
Weight	1.8 kg 4 Lb	Including battery
Connectivity	USB-C Wi-Fi	USB 3.0 Available in selected markets
Battery	Rechargeable & swappable smart battery	Battery life \pm 4 hours
Hardware connections	1/4" screw connection	Tripod mountable

STORAGE

Internal	500 Gb	Activated by package
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DISPLAY & CAMERA

Touch display	7-inch LCD capacitive touchscreen	
Display resolution	720x1280	
Camera resolution	1280x960	

ACOUSTICS

SNR(A-weighted @1Khz)	66dB per channel	@ 1kHz, 94dB SPL
Sensitivity	-37 \pm 1 dB FS	At 1 kHz, 94 dB SPL
Acoustic overload point	132.5 dB SPL	At 1 kHz, <10% THD
Auto min/max	Auto or manual, user selectable	

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MEASUREMENT FEATURES

Frequency range	10 Hz - 120kHz
Frequency resolution	29Hz
Beamforming (far field)	2kHz - 60kHz, 2kHz - 120kHz
Operating distance	0.3m to 120m 1ft to 394ft

DATA FORMATS

Audio + Video	.mp4
Image	.jpeg

OPERATING CONDITIONS

Temperature	-20° C to 50° C -4° F to 122° F
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Sorama CAM iV64s - software packages Industry

LEAK INSPECTION

Leak inspection can be used to identify gas, air, vacuum and compressed air leaks in pressurized systems by capturing both audible and ultrasonic sounds. This method quickly locates leaks and estimates their size. Ideal for various settings, it provides a non-invasive, real-time solution to pinpoint leaks, helping improve safety and efficiency. Estimated flow based on distance and noise in the environment from field-testing:

Quiet environment	0.3m to 5m 1ft to 16.4ft	0.02l/min to 0.1l/min
	5m to 10m 16.4ft to 32.8ft	0.1l/min to 0.2l/min
Noisy environment	0.3m to 5m 1ft to 16.4ft	0.05l/min to 0.15l/min
	5m to 10m 16.4ft to 32.8ft	0.15l/min to 0.3l/min

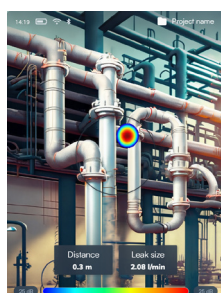
The specified leak rate detection is contingent upon the physical generation of sufficient (ultra)sound by the leak. In scenarios where a leak does not produce adequate acoustic signals, detection accuracy cannot be guaranteed.

PARTIAL DISCHARGE INSPECTION

Partial discharge inspection identifies faults in high-voltage equipment, such as cracks or gaps in insulation. These faults cause discharges when voltage is applied. Tracking these discharges over time provides insight into the condition of the equipment. A useful tool for this analysis is the Phase-Resolved Partial Discharge (PRPD) plot, which helps diagnose issues within the insulation.

MECHANICAL INSPECTION

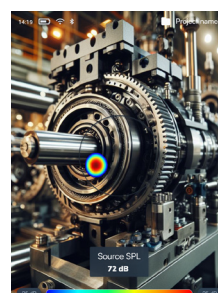
Mechanical inspections help detect early signs of wear in machines, such as faulty bearings, cavitation in pumps, or worn-out rollers. By monitoring healthy machines over time, you can spot potential problems before they cause unexpected failures. This allows for proactive maintenance, helping avoid costly downtime and ensuring equipment runs smoothly.



Leak inspection



Partial discharge inspection



Mechanical inspection