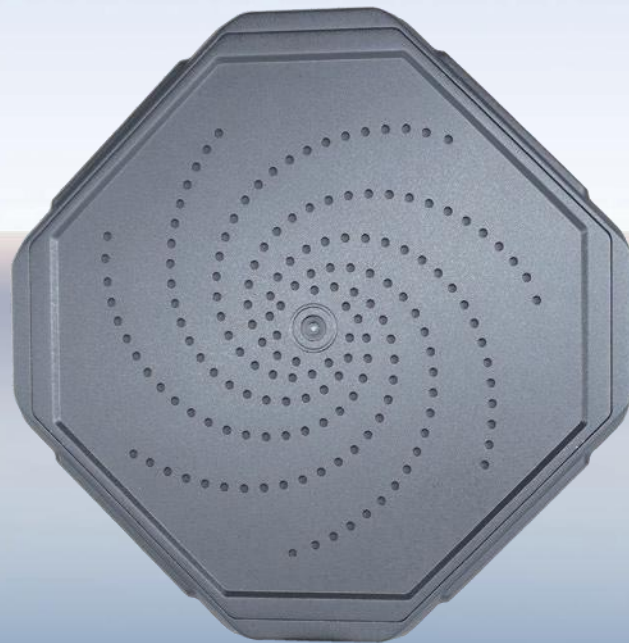


Fixed Acoustic Imager

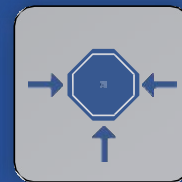
FAC168



Sound Localization



IP65 Design



Flexible Mounting Solutions

SATIR

Fixed Acoustic Imager



The SATIR acoustic imager can capture faint sounds that are inaudible to the human ear, providing a reliable signal source for acoustic fingerprint fault diagnosis and recognition algorithms. In addition to its acoustic signal acquisition capabilities, the imager integrates an FPGA processor and optimized acoustic imaging algorithms, enabling real-time acoustic imaging to visualize sound, and locate noise sources.

The SATIR acoustic imager can be flexibly installed either on inspection robots or fixedly mounted on stands around critical facilities. You can use the acoustic imager to achieve uninterrupted 24/7 sound signal collection and analysis of the monitored facilities. By analyzing acoustic fingerprints, the imager can assess the health status of equipment, provide early warnings of facility failures, and utilize artificial intelligence technology for diagnostic classification.

The SATIR acoustic imager can capture ultra-wideband signals up to 100kHz, covering both audible and ultrasonic frequencies. It is suitable for a wide range of applications, including the power industry, petrochemicals, factory production line sound inspection, environmental noise monitoring, and mechanical fault noise localization.

Interface and installation forms

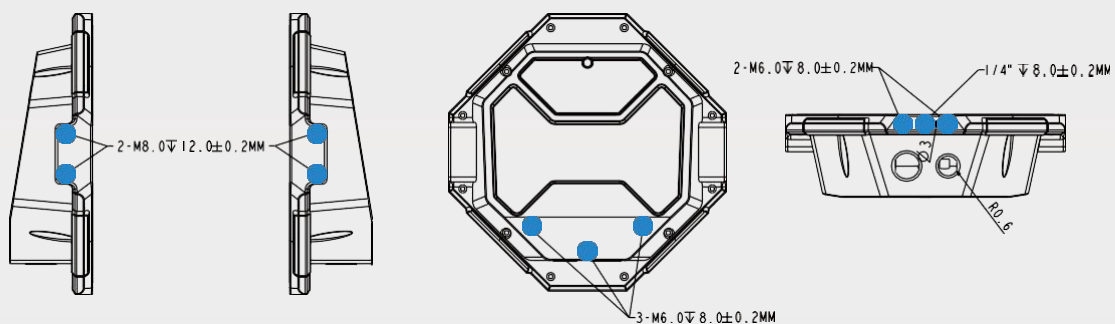


12~26V DC

100M Ethernet / 48V PoE

Flexible Installation Form

Reserved mounting holes at the bottom, back, and sides



Specifications



Number of Microphones	168
Sensitivity	-26 dBFS(1 kHz, 94 dB SPL)
Signal-To-Noise Ratio	64.3 dB(A)
Sound Sampling Rate	200 kS/s
Maximum Imaging Frequency Range	2 kHz - 100 kHz
Resolution	13 Mpx
Communication	HTTP / TCP / RTSP / RTMP
Power Supply	12-26V DC, 48V PoE
Minimum Leak Rate	2.5m, 1.72bar, 0.25ml/s
Weight	1.3 kg
Size	23cm x 23cm x 8cm
Recommended Imaging Range*	0.5 - 150 m
Operating Temperature	-40 ~ 70°C
Relative Humidity	5% ~ 95%
Ingress Protection Code	IP65
Explosion-Proof	Optional

*The maximum imaging range depends on the amplitude of sound to detect.