ACM-582 | AI CEILING MICROPHONE



Relacart's latest innovation, the ACM-582 AI Ceiling Microphone, combines cutting-edge AI technology and advanced acoustic engineering to deliver unparalleled audio quality for any space. This ceiling-mounted solution is not just a technological breakthrough but a versatile tool for environments like conference rooms, classrooms, and auditoriums, ensuring every word is captured with precision and clarity.

ACM-335 | AI CEILING MICROPHONE



Relacart's latest innovation, the ACM-335 AI Ceiling Microphone, combines cutting-edge AI technology and advanced acoustic engineering to deliver unparalleled audio quality for any space. This ceiling-mounted solution is not just a technological breakthrough but a versatile tool for environments like conference rooms, classrooms, and auditoriums, ensuring every word is captured with precision and clarity.

Key Features

360° AI Noise Reduction

- Removes background noise from both uplink and downlink communications while preserving voice clarity, enabling natural conversations in any setting.

Intelligent De-reverberation

- Utilizes Deep Neural Networks (DNN) to eliminate echoes in reflective spaces (e.g., concert halls), enhancing Direct-to-Reverberant Ratio (DRR) for crystal-clear voice reproduction.

Full-Duplex Acoustic Echo Cancellation

- Eliminates echoes even during simultaneous speech, ideal for low Signal-to-Noise Ratio (SNR) environments without relying on mechanical design.

Dynamic Feedback Suppression

- Integrated AI processor instantly identifies and suppresses narrow band feedback between speakers and microphones, ensuring stable, distortion-free audio.

Product Specification



ACM-582
AI Ceiling Microphone



ACM-335
AI Ceiling Microphone

Coverage Area:	25×25 ft (7.6×7.6 m)
Coverage Type:	Automatic
Power Requirements:	PoE/PoE+ (IEEE 802.3af/at)
Power Consumption:	Max 3W
Control Software:	TDM
Cable Requirement:	Cat5e or higher (shielded recommended)
Connector Type:	RJ45
Plenum Rating:	UL2043 (suitable for air-handling spaces)
Dust Protection:	IEC 60529 IP5X
Operating Temperature:	-5°C (23°F) to 40°C (104°F)
Storage Temperature:	-25°C (-13°F) to 60°C (140°F)

Microphone Parameters

Microphone Element:	5 MEMS arrays
Frequency Response:	100Hz – 8kHz
AES67/Dante Output – Channels:	1 channel
AES67/Dante Output – Sample Rate:	48kHz
AES67/Dante Output – Bit Depth:	24-bit
Sensitivity (at 1kHz):	-1.5dBFS/Pa
Max SPL:	96dB SPL
SNR (ref. 94dB SPL, 1kHz):	75dB (A-weighted)
Latency (excl. Dante latency):	48ms
Self-Noise:	22dB SPL (A-weighted)
Dynamic Range:	75dB
ACM-582 Dimensions(mm):	582(W)×582(H)×52(D)
ACM-335 Dimensions(mm):	335(Φ)×33(D)

Digital Signal Processing

Acoustic Echo Cancellation (AEC)
AI Noise Reduction
Auto Gain Control (AGC)
Mute Function