1128SYSM



IP Compliant Loudspeaker System with Microphone



Features

- IP Speakers From Atlas Sound Allow Users or System Administrators to Send Live, Prerecorded, or Ad Hoc Messages Along with Control Data to Speaker End Points Over New or Existing Multicast Enabled Local Area Networks.
- Also Compatible with SIP (Session Initiation Protocol) VoIP Systems. Contact Atlas Sound for SIP Configuration Info.
- Highly Efficient 10oz Dual Cone Loudspeaker System Provides 94dB Average SPL @ 1W/1M and Is Capable of 103dB @ 1 Meter Via the Rated Power of the Internal IP Addressable Amplifier
- 105° Dispersion in the 2kHz Octave Band (-6dB)
- Wide Frequency Response of 86Hz 8kHz (-5dB) Is Perfect for Speech and General Messaging Playback
- Built-In Microphone for Half Duplex Communication

General Description

Model I128SYSM from Atlas Sound consists of a factory assembled loudspeaker, baffle, microphone, and PCB amplifier / control board securely mounted to the rear of the baffle via concealed weld studs. The amplifier / control board is capable of producing 9 Watts RMS into the 8Ω loudspeaker with 9VDC minimum power provided by IEEE 802.3af compliant POE switches. Local 12VDC - 18VDC PSUs may also be used instead of POE switches. Interconnection is via a board mounted female RJ-45 connector. The industry standard C10A loudspeaker used in the I128SYSM is a dual cone 8" (205mm) loudspeaker with a 10oz (260g) ceramic magnet. It includes a curvelinear paper cone for lower harmonic distortion. The loudspeaker is also equipped with a full 1" (25mm) diameter copper voice coil with aluminum former for better heat dissipation. An omni directional subminiature (1/4" / 6mm), electret condenser microphone is mounted behind the steel perf grille adjacent to the loudspeaker for 2-way communication and/or monitoring from the loudspeaker location to any PC or IP phone in the system. The 18-gauge construction of the metal baffle provides security and durability in commercial applications. A perforated 22-gauge metal screen is provided over the loudspeaker to maximize performance by allowing the optimum percentage of open area forward of the loudspeaker. The baffle is finished in neutral white electrostatic powder coat.

Loudspeaker Specifications

8" (203mm) Speaker Size Power Handling 15 Watts Sensitivity (SPL @ 1W/1M) 94dB

Frequency Response¹ 86Hz - 8kHz (±5dB)

Dispersion² 105°

Cone Material Treated Paper

Surround Material & Dampening Dampened Self-Storage Flux Density 10,600 Gauss, 1.06 Tesla Magnet Weight Nominal, 10oz (260g)

Stamped, Plated 20-gauge CRS Basket Material

Voice Coil Diameter 1" (25mm) Voice Coil Material Cooper

Voice Coil Former Material Black Anodized Aluminum

Voice Coil Winding Width 0.225" (6mm) Top Plate Thickness .239" (6mm) Weight 32oz (908g) Diameter 8.125" (206mm) Depth 2.875" (73mm)

Mounting Dimensions 7.625" (194mm) Bolt Circle

1. Measured in recommended enclosure 2. 6dB down point, 2kHz octave band

Microphone Specifications

Microphone Type Omni Directional Subminiature Electret Condenser

Diameter .25" (6mm)

Baffle Specifications

Baffle Material 18-gauge CRS

Speaker Grille Material 22-gauge Perforated Steel

Overall Width 11.94" (303mm) 23.67" (601mm) Overall Height Depth (Front of Baffle to Rear of Enclosure) 4.89" (124mm)

Color White

Amplifier / Control Specifications

Power Rating 9 Watts RMS into an 8Ω Load with 9VDC Input

RJ-45 Female on PCB Accessible from Rear of Inputs

Speaker

Outputs 2 Wire Main ± Terminated to Loudspeaker

IEEE 802.3af Compliant POE Network Switches or Power Source

Local 12VDC - 18VDC PSU

Dimensions 4.25" (108mm) x 7.25" (184mm)

Mounting 4 Holes to Weld Studs on Baffle (Factory Assembled)

Network Control Multicast Enabled Networks

GPI Specifications

Relay Output 50V at 500mA Max

Input Minimum 1mA to run on 50V Max



Applications

The perfect choice for Education, Military / Government, and Large Scale Corporate applications. It provides the capability to simultaneously send a multicast audio stream and text messages to any combination of IP phones, Atlas Sound IP speakers, and PCs. With the push of a single button on the phone or a single click from a PC, a user can send a live, recorded, or scheduled broadcast to one or more paging groups. With IP compliant loudspeaker products from Atlas Sound, system designers and integrators will have the ability to deploy extremely large scale and complex paging systems over new or existing networks with the convenience of centralized administration by IT personnel.

Extreme cost savings can also be realized from the elimination of separate "stand alone" paging & clock / bell systems when ControlKom™ is utilized in education applications in conjunction with the model I128SYSM speaker system.

Architect & Engineer Specifications

Unit shall be Atlas Sound Model I128SYSM. The loudspeaker system shall include factory assembled loudspeaker, IP addressable PCB amplifier / control, microphone for two way communication & monitoring, metal baffle, and enclosure. The loudspeaker shall have a 10oz (260g) ceramic magnet and a seamless cone. Frequency response range shall be 86Hz - 8kHz (±5dB). Sensitivity shall be 94dB average. Voice coil former shall be black anodized aluminum to help dissipate heat, have an impedance of 8Ω and a diameter of 1" (25mm). The IP addressable PCB amplifier / control shall be mounted to the rear of the loudspeaker baffle via concealed weld studs. The amplifier / control PCB shall be capable of producing 9 Watts RMS with a minimum of 9VDC power provided either locally or via IEEE 802.3af compliant POE switches. Interconnect shall be via female RJ-45 connector mounted to the PCB. An omni directional subminiature (1/4" / 6mm), electret condenser microphone shall be mounted behind the perforated steel grille adjacent to the loudspeaker for 2-way communication and/or monitoring from the loudspeaker location to any PC or IP phone in the system. All control functionality of the PCB amplifier and microphone shall be determined via software. The metal loudspeaker baffle overall dimensions shall be 11.94" (303mm) wide by 23.67" (601mm) tall. Enclosure shall be included. Finish shall be Atlas Sound neutral white electrostatic powder coat. Enclosure shall be included.



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