



# I8SM

## IP Compliant Loudspeaker System with Internal Microphone



I8SM

### Loudspeaker Specifications

Speaker Size	8" (203mm)
Power Handling	15 watts
Sensitivity (SPL @ 1W/1M)	94dB
Frequency Response <sup>1</sup>	86Hz – 8kHz (±5dB)
Dispersion <sup>2</sup>	105°
Cone Material	Treated Paper
Surround Material & Dampening	Polymer Dampened Integral Paper Surround
Flux Density	10,600 Gauss, 1.06 Tesla
Magnet Weight	Nominal, 10oz (260g)
Basket Material	Stamped, Plated 20-gauge CRS
Voice Coil Diameter	1" (25mm)
Voice Coil Material	Copper
Voice Coil Former Material	Black Anodized Aluminum
Voice Coil Winding Width	0.225" (6mm)
Top Plate Thickness	.239" (6mm)
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	¼" (6mm)

### Baffle Specifications

Baffle Material	18-gauge CRS
Overall Width / Height	11½" (292mm) Square
Depth (Front of Baffle to Rear of Speaker)	4.21" (107mm)
Depth (Rear of Baffle to Rear of Speaker)	4.07" (103mm)
Color	White

### Amplifier / Control Specifications

Power Rating	9 Watts RMS into an 8Ω Load with 9VDC Input
Inputs	RJ-45 Female on PCB Accessible from Rear of Speaker
Outputs	2 Wire Main ± Terminated to Loudspeaker
Power Source	AF Compliant POE Network Switches / Local 12-18VDC PSU
Dimensions	4¼" (108mm) x 7¼" (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

### 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.
- 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

### General Description

Model I8SM from Atlas Sound consists of a factory assembled loudspeaker and baffle with 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 I8SM is a dual cone 8" (205mm) loudspeaker with a 10oz (260g) ceramic magnet. The 18-gauge construction of the metal baffle provides security and durability in commercial applications. The baffle is finished in neutral white electrostatic powder coat. An omni directional subminiature (¼" / 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.

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## Applications

Atlas Sound offers a comprehensive selection of loudspeaker products to compliment Prerecorded, or Ad™ and Informacast® (Cisco®) software deployments in K-12, Campus Wide Notification, Civil / Municipal, Industrial, Corporate, and Health Care applications. The loudspeakers are also SIP compatible (contact Atlas Sound for SIP documentation) to allow basic functionality with most any VoIP system. In addition, Atlas Sound is actively seeking partnerships with VoIP solution providers to create custom solutions utilizing the flexible IP loudspeaker API (Application Programming Interface).

Atlas Sound IP speakers provide nearly unlimited flexibility for paging and notification systems. 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 in education applications.

### Available Optional Enclosures:

*ENCLOSURE IS NOT INCLUDED.*

- SEA-I8S Surface mount, angled enclosure for I8SM, neutral white finish
- SEST-I8S Surface mount, straight enclosure for I8SM, neutral white finish
- FEST-I8S Flush mount straight enclosure for I8SM, reclaimed powder coat finish

## Architect & Engineer Specifications

Unit shall be Atlas Sound Model I8SM. The loudspeaker system shall include factory assembled loudspeaker, IP addressable PCB amplifier / control, metal baffle, and microphone. 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 custom designed CRS bracket. The amplifier / control PCB shall be capable of producing 9 Watts RMS with a minimum of 9VDC power provided either locally or via AF compliant POE switches. Interconnect shall be via female RJ-45 connector mounted to the PCB. All control functionality of the PCB amplifier shall be determined via software. An omni directional subminiature (¼" / 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. The microphone interface board shall include two software controlled inputs and two relay outputs. The metal loudspeaker baffle overall dimensions shall be 11½" (292mm) square. Finish shall be Atlas Sound neutral white electrostatic powder coat.

Optional enclosures shall include:

- SEA-I8S surface mount angled enclosure for I8SM - neutral white finish
- SEST-I8S surface mount straight enclosure for I8SM - neutral white finish
- FEST-I8S flush mount straight enclosure for I8SM - reclaimed powder coat finish.



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