

# I8SCH+

## PoE+ Indoor Horn System with LED Display



### Features

#### Network Features

- Dynamic or Static IP Address
- IEEE802.3 10/100Base-T Ethernet
- IEEE 802.1q Tagging
- IEEE 802.3AT Compliant

#### VoIP Standard Audio

- G.711 u-law/a-law (64 kbit/s)
- G.722 Wideband Audio (64 kbit/s)

#### Auto Provisioning

- DHCP Option 66, 150, or TFTP Server
- DHCP Option 72 for HTTP Server

#### Auto Registration

- SLP for InformaCast
- DHCP Option 72 for SA-Announce or GCK

#### Static Configuration

- HTTP GUI for Static Configuration
- Cisco SRST

#### Audio Features

- Integrated Amplifier
  - 15-Watt Total Power
  - Primary Speaker Output 8Ω
- Aux Audio Line-In Unbalanced (2.8Vpp 10K)
- Aux Audio Line-Out Unbalanced (2.8Vpp 10K)

#### Additional Features

- 2 General Purpose Inputs
- 1 Relay Output (2A @ 30 VDC)
- Phone/Night Loud Ringer
- External Power Supply Option
- 8 x 64 LED Display for Clock or Scrolling Text

### General Description

AtlasIED I8SCH+ is an indoor wall mount IP loudspeaker with high-output horn and integrated LED display. It leverages VoIP communication to extend tele-presence with enhanced audio for environments where network-wide communication is desired and high-output loudspeakers are required to overcome high ambient noise and/or large spaces.

### Applications

AtlasIED I8SCH+ registers as a communication endpoint directly within InformaCast, GCK, and SA-Announce advanced notification applications, supporting audio broadcast to enhance physical security while improving day-to-day communications through advanced alerting, bell schedules, pre-recorded & scheduled announcements, while leveraging the WAN or LAN network architecture.

When used within a Cisco environment, the I8SCH+ loudspeakers can join Cisco's Unified Survivable Remote Site Telephony (SRST) as a supported device. Cisco's SRST provides remote location call-processing redundancy when access to the centralized Cisco Unified Communications Manager is interrupted because of a WAN outage. The ability of LAN communication between any combination of phones and loudspeakers is particularly critical during an emergency (which may be the actual cause of the WAN outage).

Where 3rd party notification applications are not required, the I8SCH+ loudspeakers can register as SIP devices directly to a SIP server or VoIP Communications Manager for critical alerts and public address applications.

System	
Type	PoE+ Indoor Horn System with LED Display
Operation Mode	Self Powered
Indicators	Network Status (On Back)
Operating Range (-10db)	600Hz - 14kHz
Frequency Response (+/- 5dB)	700Hz - 5kHz
Vertical Coverage	95° 800Hz - 4kHz
Horizontal Coverage	95° 800Hz - 4kHz
Directivity Factor (Q)	7.3 @ 2 kHz
Max SPL at 1 m (passive)	114 dB SPL Continuous / 120 dB SPL Peak
Recommended Signal Processing	Built-In Processing
General Purpose Interface	Two Trigger Inputs / One Relay Output (2A @ 30 VDC)
Transducers	
Transducer Qty and Size	3.8"
Voice Coil Size	1.25"
Cone Material	Double Entrant Compression Driver
Driver Protection	Built-In Limiter
Amplification	
Type	Single-Channel Class D Topology
AC Power Input	PoE or PoE+ and External 24VDC
Power Rating (RMS)	15 Watts Max (802.3AT)
THD	<.02%
Cooling	Passive/Convection
Audio Inputs and Outputs	
Input: Analog Audio Type(s)	One Unbalanced Analog
Input: Analog Connectivity	Secured Screw Terminal Block
Input: Network Audio Type(s)	G.711 U-Law/A-Law and G.722 Capable
Input: Network Connectivity	RJ-45 Female
Output: Analog Audio Type(s)	One Unbalance Line Level
Output: Analog Connectivity	Secured Screw Terminal Block
Output: Digital Audio Type(s)	N/A
Output: Digital Connectivity	N/A
Output: Loudspeaker Level	8Ω, 9W (802.3AF), 15W (802.3AT)
Output: Loudspeaker Connectivity	Two x Secured Screw Terminal Block
Display	
Display Type	LED Display
Display Color Range	Red Only
Display Lumens	162lux
LED's Per Character	16 x 64
Character Max Height	2.125" (54mm)
Viewable Dimensions (H x W)	10.125" (257mm) x 2.5625" (65mm)
Control	Time via NTP - Text Controlled via Software
Software	
SA-Announce Compatible Versions	9.0.18+
InformaCast Compatible Version	8.0+
GCK Compatible Version	3.0+
Network	
Ethernet	IEEE802.3 10/100Base-T
PoE	IEEE802.3AF/AT Compliant
VLAN	IEEE802.1q Tagging

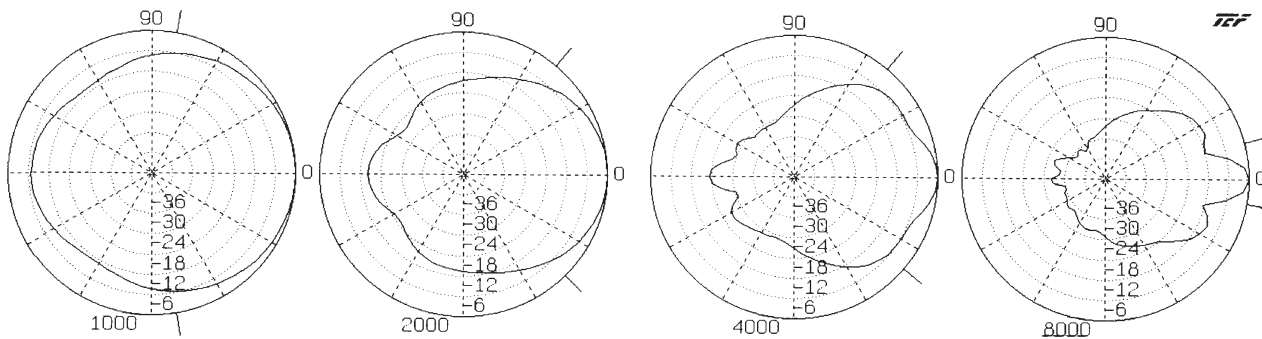
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Protocols	
IP Addressing	DHCP/Static
Auto-Provisioning	HTTP/TFTP
Auto-Registration	HTTP/Service Location Protocol/IEDNet
Time	NTP
Telephony	SIP
Enclosure	
Color	White (RAL 9010)
Grille Material	Powder Coated Steel, White Finish, Paintable
Baffle Material	18-gauge Corrosion-Resistant Zinc Plated Steel
Mounting/Rigging Provisions	Mounting Enclosure is Not Included (See Optional Enclosure)
Safety Agency Ratings	ETL Listed to Comply with UL-60950-1, and CAN/CSA-C22.2 No. 60950-1
Ingress Protection	IP-30
Logo	Blue and Removable
Product Dimensions (HxWxD)	14.38" (365mm) x 12.88" (327mm) x 3.51" (89.2mm)
Shipping Dimensions (HxWxD)	14.56" (369mm) 13.19" (335mm) x 4.5" (114mm)
Net Weight - lbs	5 lbs (2.27kg)
Shipping Weight - lbs	6.25 lbs (2.81kg)
Warranty Coverage	
Warranty Period	1 Year

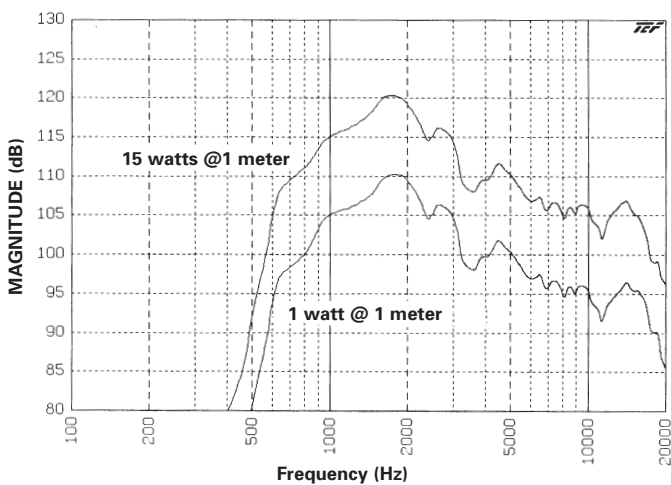
**NOTES:**

1. Sensitivity: Half space pink noise measurement at 6 ft (1.8 m) at 20% power; extrapolated to 1 meter and an input of 2.83 volts RMS.
2. Watts: All wattage figures are calculated using the rated nominal impedance.
3. Frequency response and sensitivity are half-space measurements.

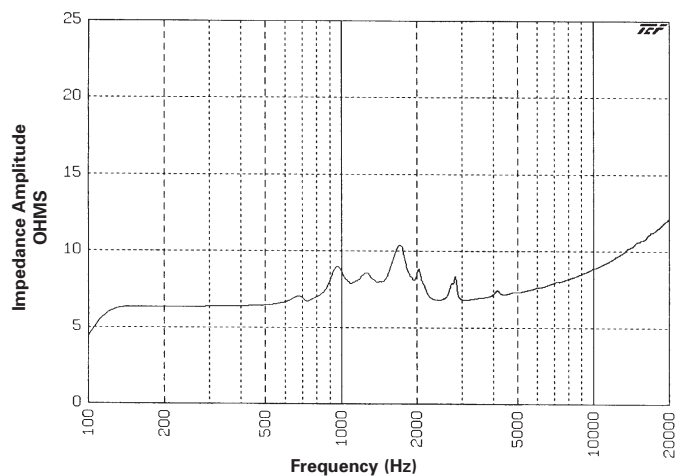
**Polars Are Normalized To Zero On Axis**



**Frequency Response**

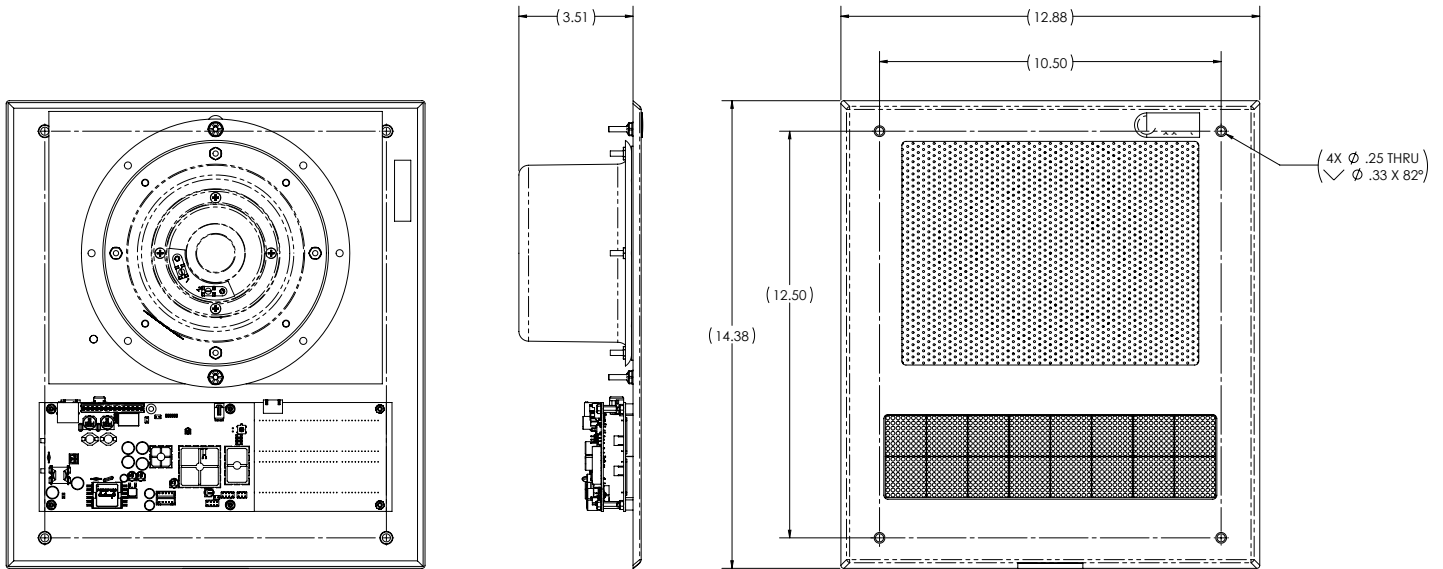


**Impedance**

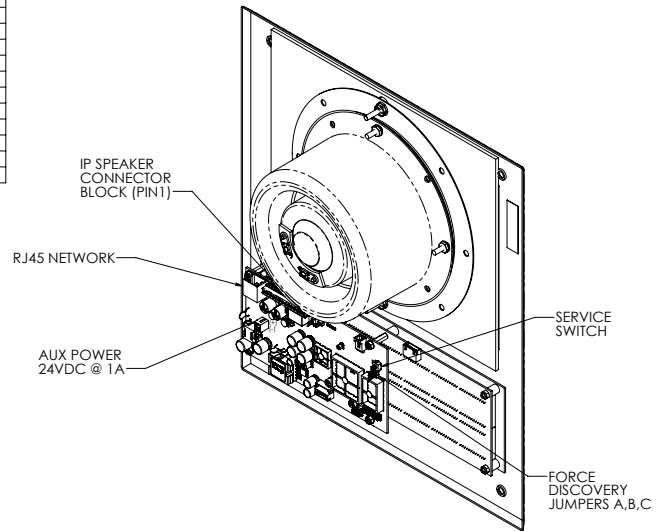
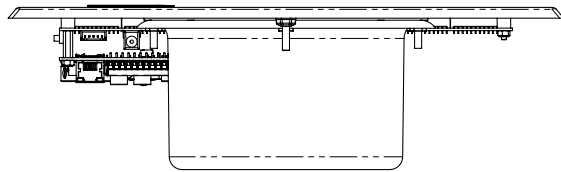


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Dimensional Drawings



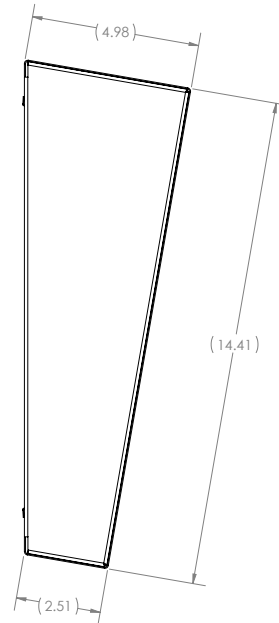
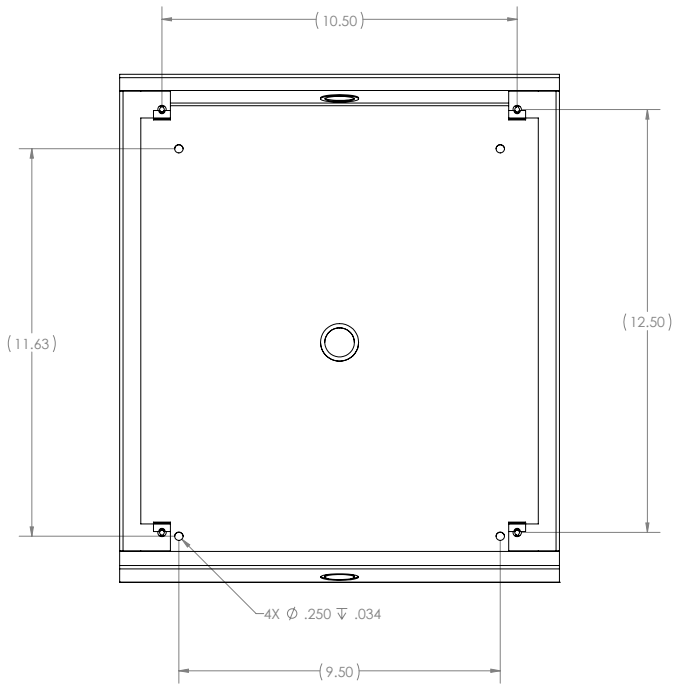
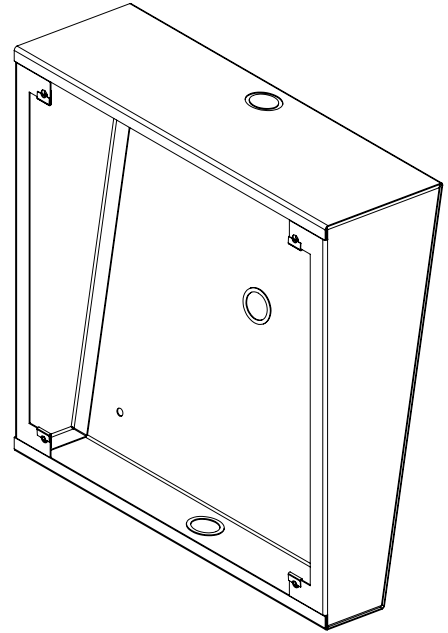
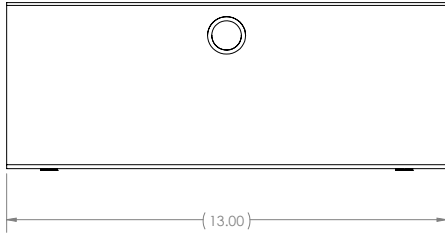
IP SPEAKER CONNECTOR BLOCK	
PIN	FUNCTION
1	REMOTE BUTTON / GPI 2 (+)
2	REMOTE BUTTON / GPI 2 (-)
3	REMOTE BUTTON / GPI 1 (+)
4	REMOTE BUTTON / GPI 1 (-)
5	RELAY (-)
6	RELAY - NORMALLY OPEN (+)
7	LINE-IN (-)
8	LINE-IN (+)
9	LINE-OUT (-)
10	LINE-OUT (+)
11	PRIMARY SPEAKER (-)
12	PRIMARY SPEAKER (+)
13	SECONDARY SPEAKER (-)
14	SECONDARY SPEAKER (+)



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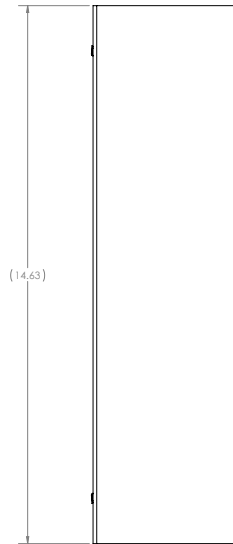
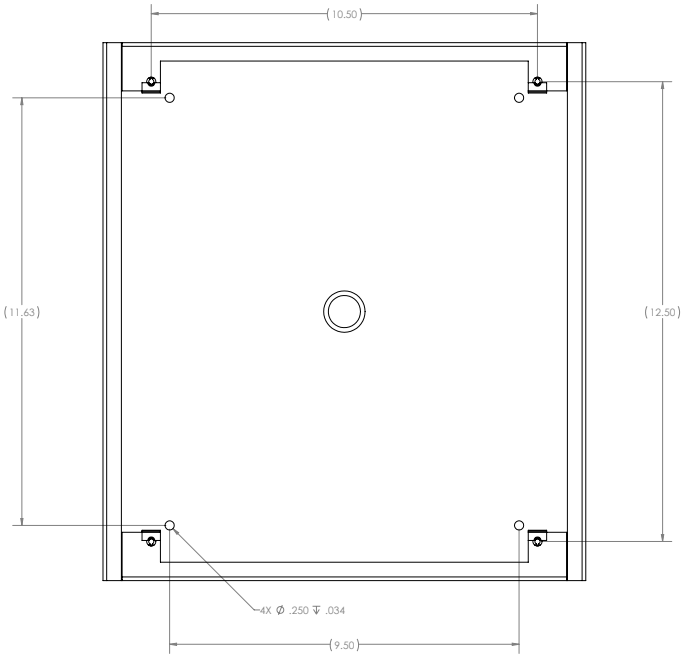
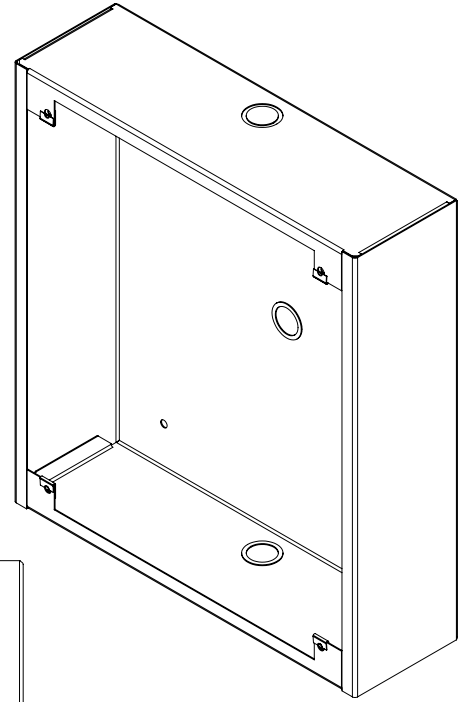
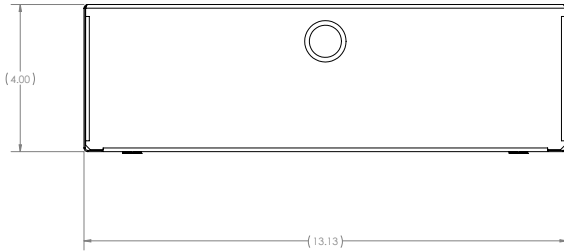
Optional Accessories

SEA-18SC



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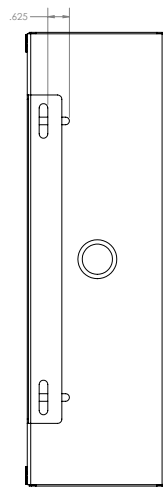
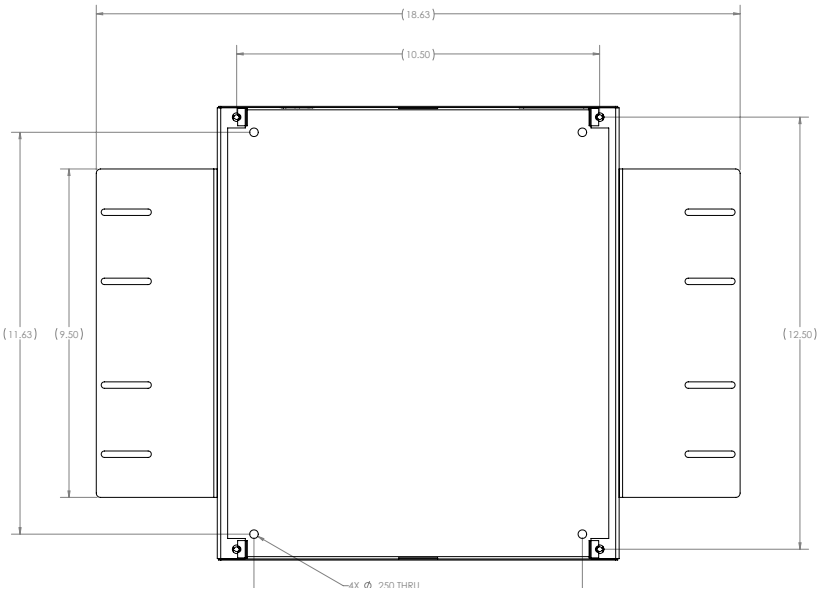
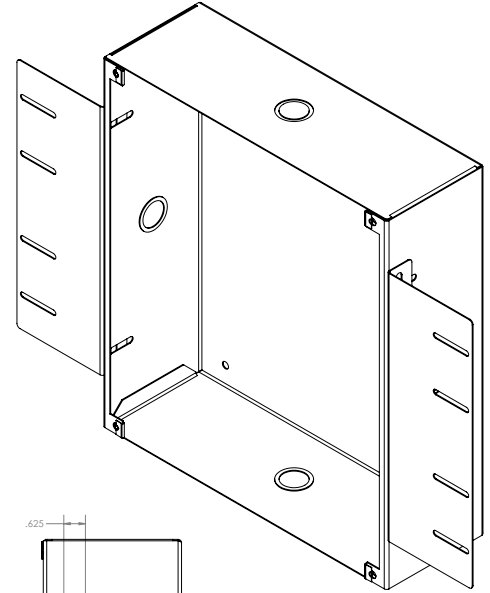
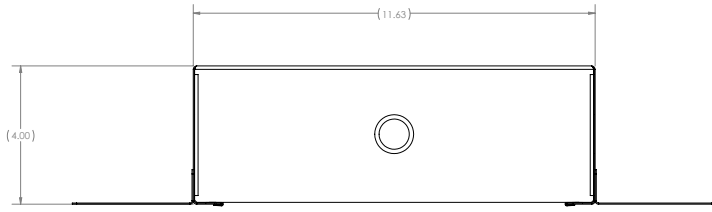
Optional Accessories  
SEST-18SC



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Optional Accessories

FEST-18SC



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## Architect and Engineer Specifications

The unit shall be AtlasIED model I8SCH+. The loudspeaker system shall include factory assembled horn loudspeaker, IP addressable PCB amplifier/control, metal baffle and LED display. The loudspeaker shall be a 3.8" high-output compression driver. The impedance shall be 8 ohm and a voice coil diameter of 1.25" (31.75mm). The loudspeaker dispersion shall be 95° (800Hz - 4kHz) and frequency response of 700Hz –5kHz (±5dB). The max peak output at 1W/1m shall be 120dB SPL.

The amplifier/control board shall be capable of producing 15-watts RMS when using an IEEE 802.3at compatible PoE+ switch or 24VDC local power supply and 9-watts RMS when used with an IEEE 802.3af compliant PoE switch. Interconnect shall be via female RJ-45 connector mounted to the PCB.

The unit shall incorporate a LED display with viewable dimensions of 10.125" (257mm) wide x 2.56" (65mm) high. The LEDs per character shall be 16 high x 64 wide and character max height of 2.125" (54mm). It shall produce the color red and be controlled by Time via NTP. The display shall produce 162 lux brightness and display text and/or time.

All control functionality shall be determined via software. The metal loudspeaker baffle overall dimensions shall be 14.38" (365mm) x 12.88" (327mm) x 3.51" (89.2mm) HxVxD. Finish shall be neutral white electrostatic powder coat.

Optional enclosures shall include:

- SEA-I8SC surface mount angled enclosure for I8SCH+ neutral white finish
- SEST-I8SC surface mount straight enclosure for I8SCH+ neutral white finish
- FEST-I8SC flush mount straight enclosure for I8SCH+ reclaimed powder coat finish

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