IP-SDH

PoE+ Indoor IP Endpoint Horn Speaker with LCD

Features

Network Features

- Dynamic or Static IP Address
- IEEE 802.3 10/100Base-T Ethernet
- IEEE 802.1q Tagging
- IEEE 802.3af and 802.3at Compliant

Audio Codec Support

- G.711 u-law / a-law (16 kbit/s)
- G.722 Wideband Audio (64 kbit/s)

Auto Provisioning

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

Auto Registration

- SLP for InformaCast
- DHCP Option 72 for Syn-Apps' Revolution

Static Configuration

- HTTP GUI for Static Configuration

Audio Features

- Integrated Amplifier
- Aux Audio Line-In Balanced (2.8Vpp 10K)
- Aux Audio Line-Out Balanced (2.8Vpp 10K)

Additional Features

- 2 General Purpose Inputs
- Cisco SRST
- 1 Relay Output (2A @ 30 VDC)
- Phone / Night Loud Ringer
- External Power Supply Option
- LCD for Clock / Date and Scrolling Text

General Description

AtlasIED IP-SDH is an indoor wall mount IP endpoint speaker with high-output horn, and LCD. It compliments the Unified Communications (VoIP Communications) investment including on-premises and hosted infrastructure platforms so that information can be pushed to spaces beyond the world of desktop telephony communication and breaking any traditional audio-path barriers.

Applications

AtlasIED IP-SDH registers as a communication endpoint directly within InformaCast, GCK, and Syn-Apps' Revolution 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 IP-SDH speakers 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 speakers 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 IP-SDH speakers can register as SIP devices directly to a SIP server or VoIP Communications Manager for critical alerts and public address applications.

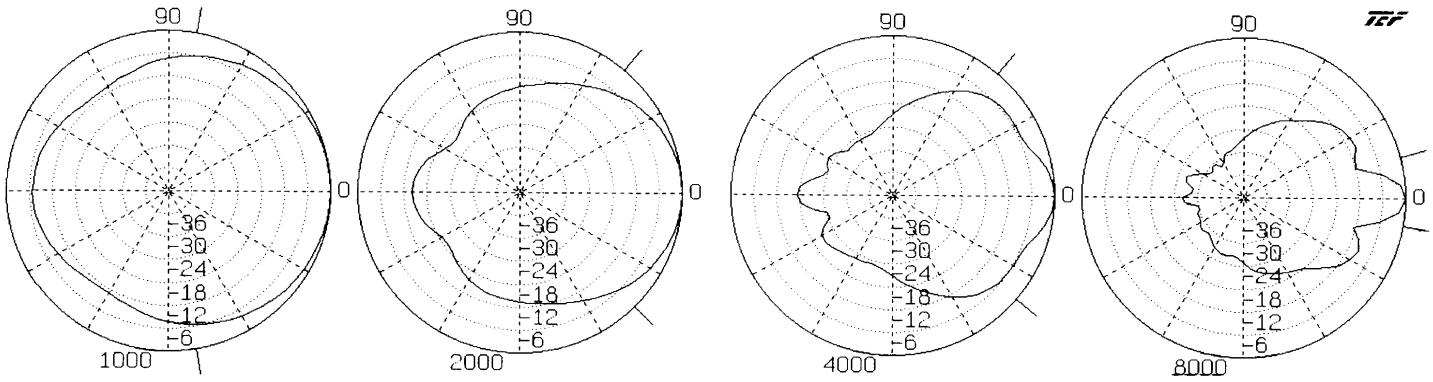
Under Title II of the ADA, all state and local governments are required to take steps and ensure effective communication to people with disabilities. The AtlasIED IP-SDH IP speakers with LCD display provide effective communication for all individuals.

System	
Type	PoE+ Indoor IP Endpoint Horn Speaker with LCD
Operation Mode	Self Powered
Indicators	Network Status (On Back)
Operating Range (-10db)	600Hz - 14kHz
Frequency Response (+/- 5dB)	600 - 14,000 Hz (Nominal)
Vertical Coverage	95° (-6dB, 2000 Hz Octave Band)
Horizontal Coverage	95° (-6dB, 2000 Hz Octave Band)
Max SPL at 1m (Passive)	120dB at 15 Watts (Peak)
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
Amplification	
Type	Single-Channel Class D Topology with Primary and Secondary Outputs
AC Power Input	PoE or PoE+ and External 24VDC
Power Rating (RMS)	12 Watts Max (802.3AF) / 25 Watts Max (802.3AT)
THD	<0.2%
Cooling	Passive / Convection
Driver Protection	Built-In Limiter
Audio Inputs and Outputs	
Input: Analog Audio Type(s)	One Balanced Line Level
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 Balanced Line Level
Output: Analog Connectivity	Secured Screw Terminal Block
Output: Digital Audio Type(s)	G.711 U-Law / A-Law and G.722 Capable (Multicast)
Output: Digital Connectivity	N/A
Output: Speaker Level	8Ω, 12W (802.3AF), 25W (802.3AT)
Output: Speaker Connectivity	Primary and Slave Secured Screw Terminal Block
Display	
Display Type	High Resolution Back-Lit Color Liquid Crystal Display
Display Color Range	16 Million Color Options for Both Backlight and Text
LCD Display	Scrolling Text Character Count - 160
Surface Luminance	1900 cd/m^2 Minimum, All White Pixels
Character Max Height	480 Pixels
Viewable Dimensions (H x W)	8.66" (221mm) x 2.23" (57mm)
Control	Time via NTP - Text Controlled via Software
Software	
GCK® Compatible Version	3.0+
InformaCast Advanced Compatible Version	8.0+
InformaCast Fusion Compatible Version	3.0+
SA-Announce Compatible Versions	9.0.18+

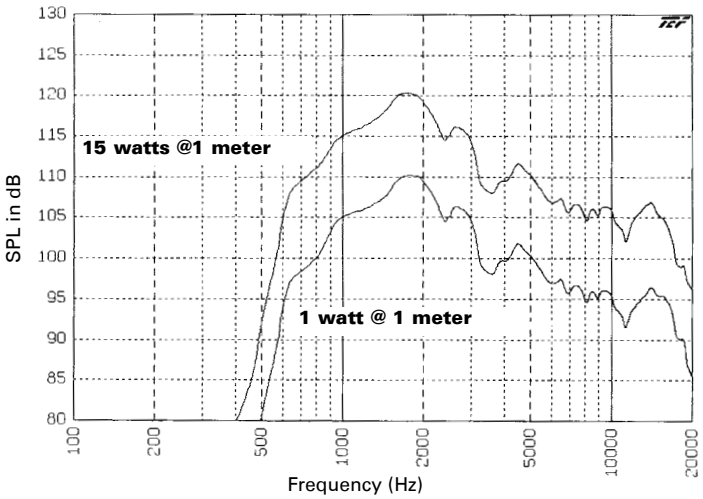
Network	
Ethernet	IEEE 802.3 10/100Base-T
PoE	IEEE 802.3 AF/AT Compliant
VLAN	IEEE 802.1q Tagging
Protocols	
IP Addressing	DHCP / Static
Auto-Provisioning	HTTP / TFTP
Auto-Registration	HTTP / Service Location Protocol / IEDNet
Time	NTP
Telephony	SIP
Enclosure	
Color	White
Grille Material	Powder Coated Steel
Baffle Material	Plastic
Mounting / Rigging Provisions	4 x Screws
Safety Agency Ratings	ETL Listed to Comply with 62368-1, CSA C22.2 #62368-1, IEC 62368-1 CB Scheme and FCC
Ingress Protection	N/A
Logo	One Color Print
Product Dimensions (HxWxD)	14.37" x 12.87" x 4.18" (365mm x 327mm x 106mm)
Shipping Dimensions (HxWxD)	15.5" x 13.9" x 5.5" (394mm x 353mm x 140mm)
Net Weight - lbs	5.21lb (2.36kg)
Shipping Weight - lbs	6.66lb (3.02kg)
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.

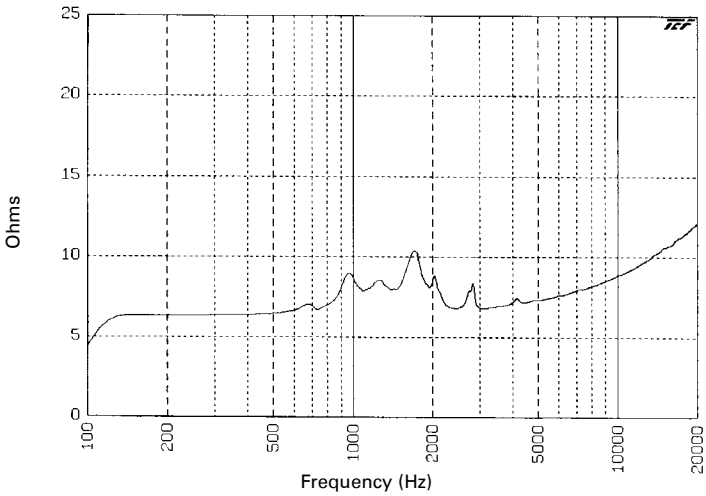
Polars Are Normalized To Zero On Axis



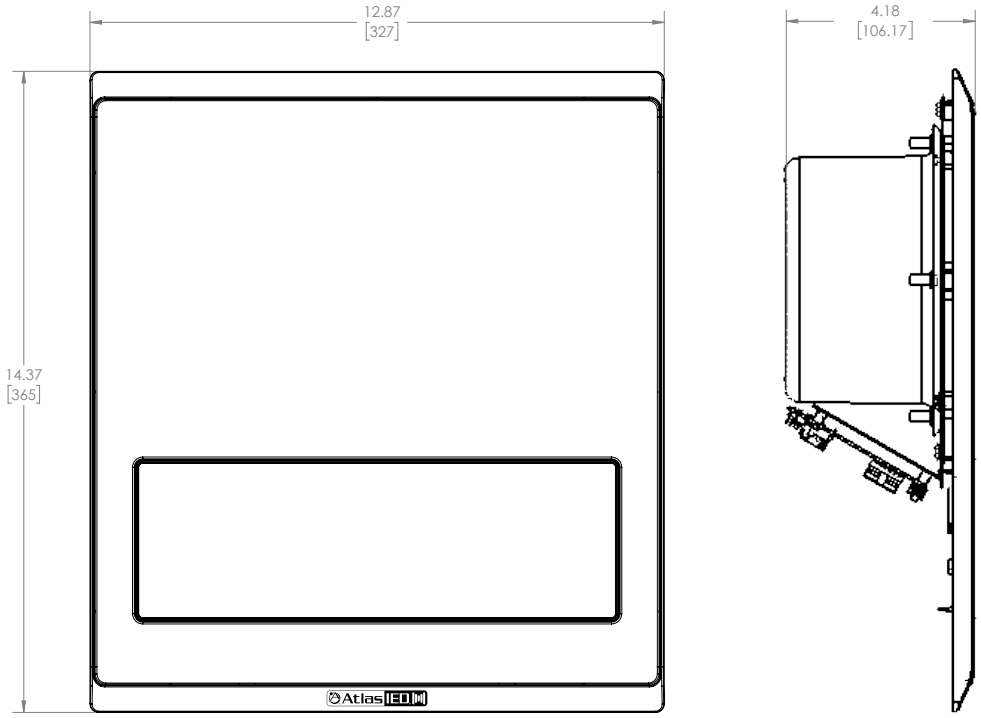
Frequency Response

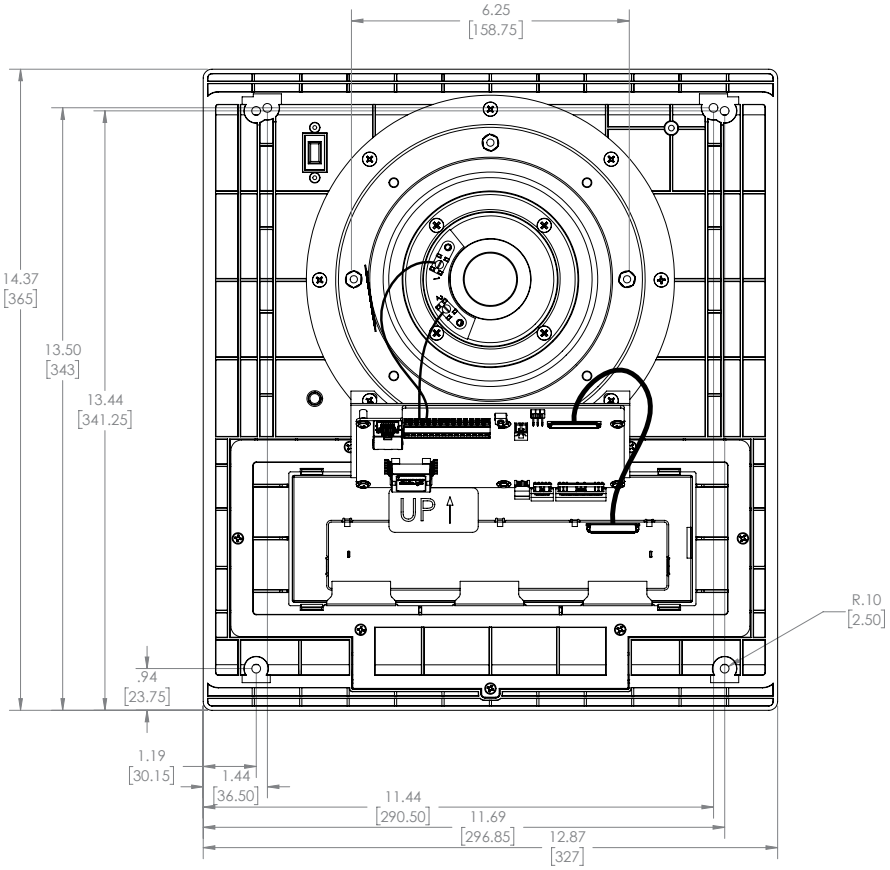


Impedance



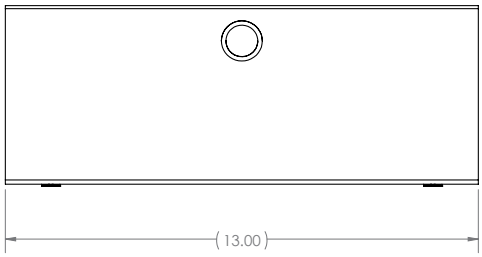
Dimensional Drawings

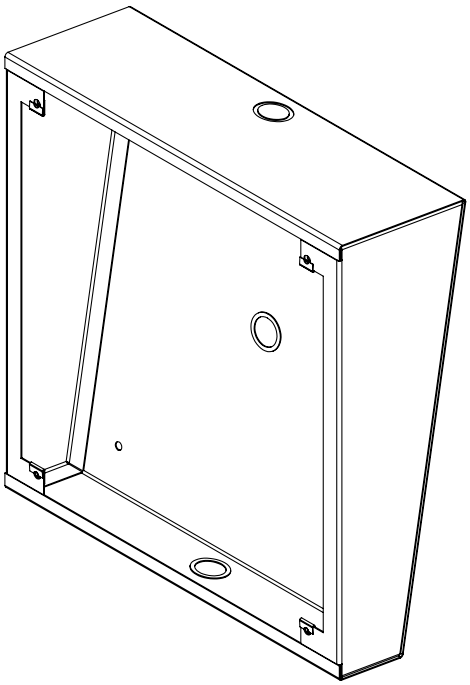


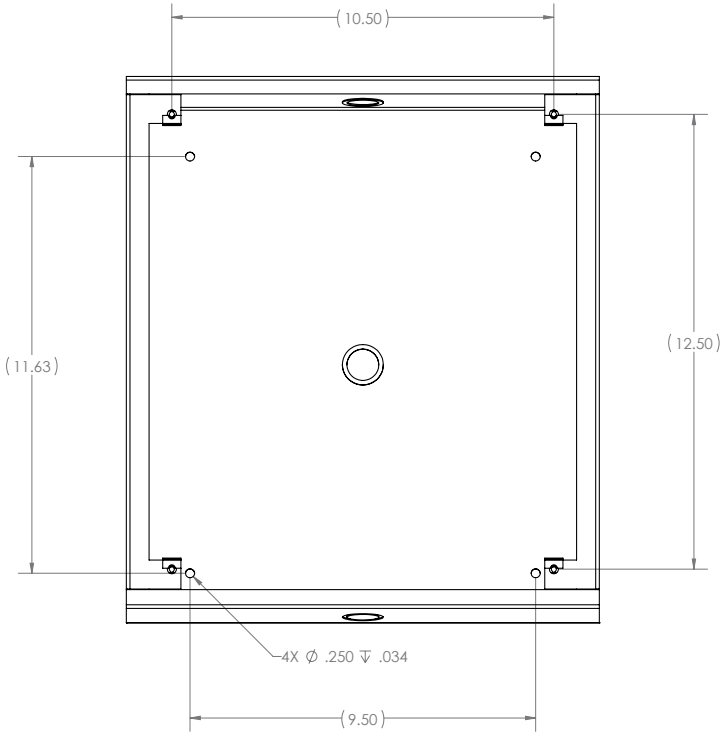


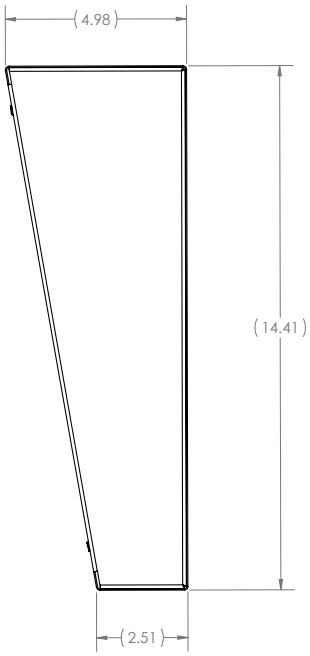
Accessories

IP-SEA-SD



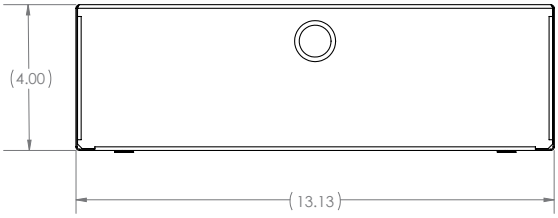


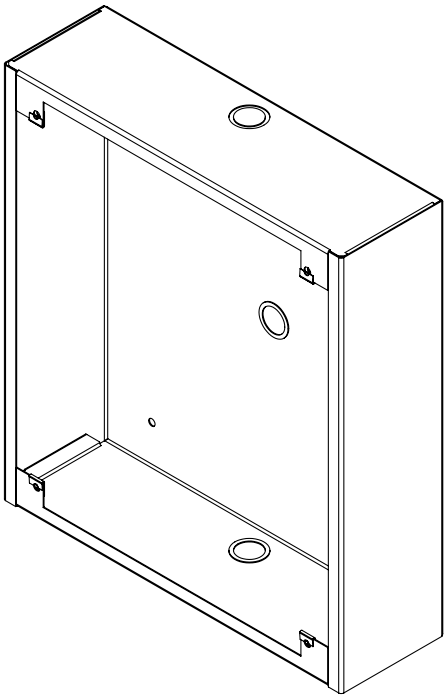


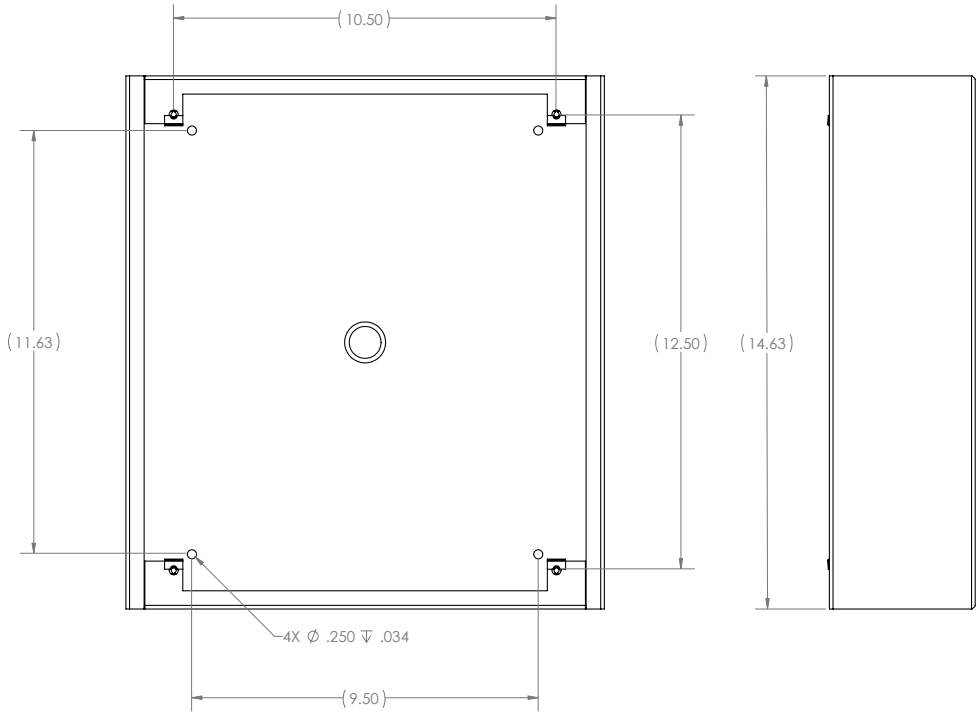


Accessories

IP-SEST-SD

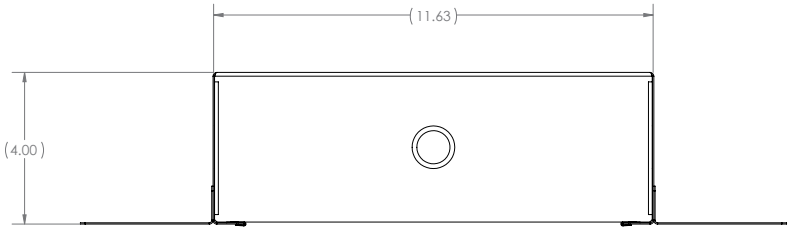


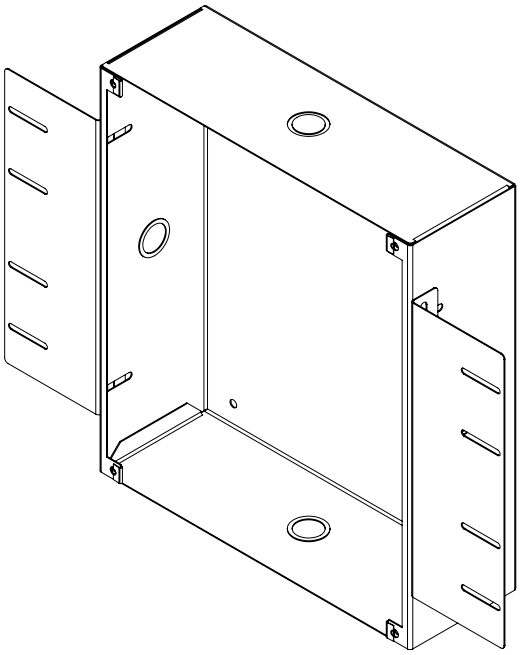


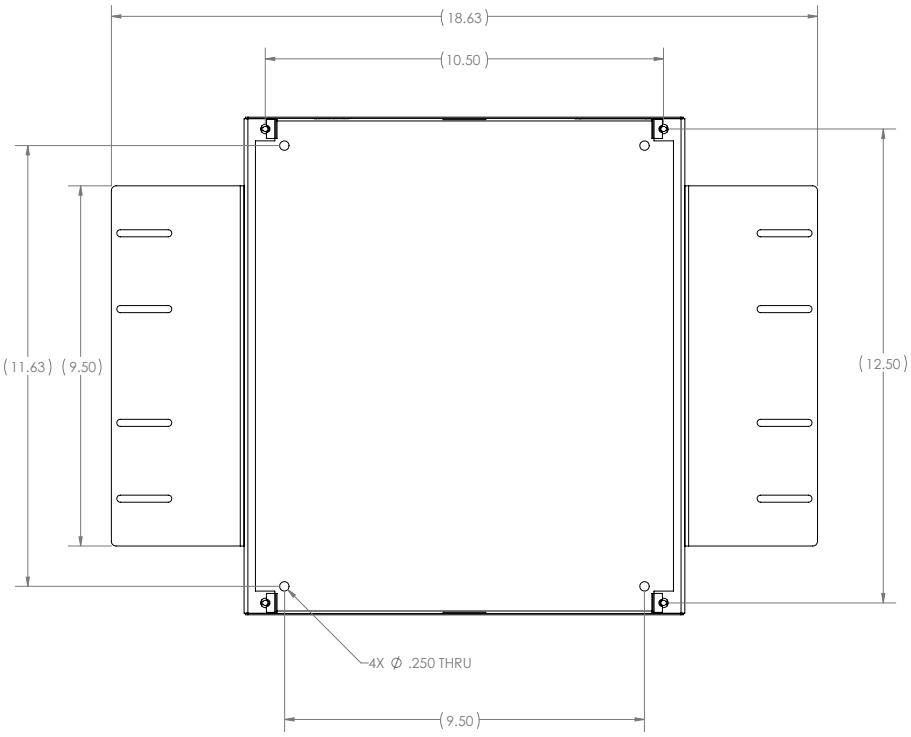


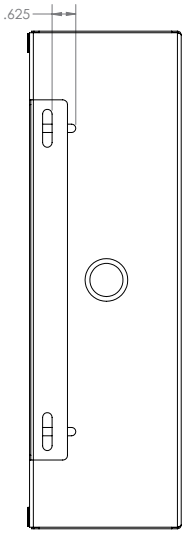
Accessories

IP-FEST-SD









Architect and Engineer Specifications

The unit shall be AtlasIED model IP-SDH. The PoE+ Indoor IP Endpoint Horn System shall include factory assembled Horn, IP addressable PCB amplifier / control, LCD multi-color display, and plastic baffle.

The horn shall be a double re-entrant type with a 3.8" high-output compression driver mounted within weather-resistant housing. The impedance shall be 8 ohm and a voice coil diameter of 1.25" (32mm). Frequency response shall be 600-14,000 Hz (nominal), 700-5500 Hz (± 5dB). Sound pressure level shall be 114dB (15W/1m), 104dB (1W/1m), and max peak output at 1W/1m shall be 120dB SPL. Sound dispersion angle shall be 95°. The Horn dimensions shall be Dia 5 5/8" x D 3 7/16" x Dia Flange 6 15/16".

The amplifier / control board shall receive announcements and messages using dynamically routed data on a standard Ethernet Network. It shall include a Single-Channel Class D Topology amplifier with Primary and Secondary Outputs capable of producing 25-watts RMS when using an IEEE 802.3at compatible PoE+ switch or 24VDC local power supply and 12-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 amplifier / control board shall include (2) logic inputs, (1) relay output, (1) Auxiliary Balanced line level audio input and (1) Balanced line level audio output. The Auxiliary Line Level input shall include an auto mute function that is activated when a broadcast is sensed from the control application.

The amplifier / control board shall include a Graphical User Interface (GUI) for SIP configuration. The SIP implementation shall support standards G.711, G.722 and RTP protocols. The Graphical User Interface (GUI) shall configure and manage logic inputs, relay outputs, and Auxiliary audio input.

The unit shall incorporate a High-Resolution Back-Lit color LCD display with viewable dimensions of 8.66" (221mm) wide x 2.23" (57mm) high. It shall receive visual notifications by AtlasIED's GCK, Syn-Apps' Revolution, Singlewire's InformaCast software platforms. It shall display time and date when in standby mode from AtlasIED's GCK, Syn-Apps' Revolution, Singlewire's InformaCast software platforms or by NTP. The display shall produce 1900 cd/m^2 lux brightness and display text and / or time.

All control functionality shall be determined via software. It shall be compatible with AtlasIED's GCK, Syn-Apps' Revolution, Singlewire's InformaCast software platforms and SIP standalone operation. The PoE+ Indoor IP Endpoint Speaker System overall dimensions shall be 14.38" (365mm) x 12.88" (327mm) x 4.18" (106mm). Finish shall be neutral white electrostatic powder coat micro perforated grill with plastic trim ring.

Optional enclosures shall include:

IP-SEA-SD	Surface mount angled enclosure for IP-SDH neutral white finish
IP-SEST-SD	Surface mount straight enclosure for IP-SDH neutral white finish
IP-FEST-SD	Flush mount straight enclosure for IP-SDH reclaimed powder coat finish