IP-SDFMLED

PoE+ Indoor IP Endpoint with Speaker, LED Display, Microphone, and LED Flasher

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, for TFTP Server
- DHCP Option 72 for HTTP Server

Auto Registration

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

Static Configuration

- HTTP GUI for Static Configuration

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
- Cisco SRST
- 1 Relay Output (2A @ 30 VDC)
- Phone/Night Loud Ringer
- External Power Supply Option
- LED Display for Clock
- Front Panel LED Flashers Allow for ADA Compliance
- Integrated Microphone Allows for Half-Duplex or Full-Duplex Paging Based on Software Platform Used

General Description

AtlasIED IP-SDFMLED is an indoor wall mount IP endpoint speaker with integrated talkback microphone, LED display and LED flasher. It leverages VoIP communication to extend tele-presence with enhanced audio for environments where network-wide communication is desired and high-output speakers are required to overcome high ambient noise and/or large spaces.

Applications

AtlasIED IP-SDFMLED 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 IP-SDFMLED 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-SDFMLED speakers can register as SIP devices directly to a SIP server or VoIP Communications Manager for critical alerts, intercom 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-SDFMLED IP speakers with talkback microphone, LED display and LED flasher provide effective communication for all individuals.

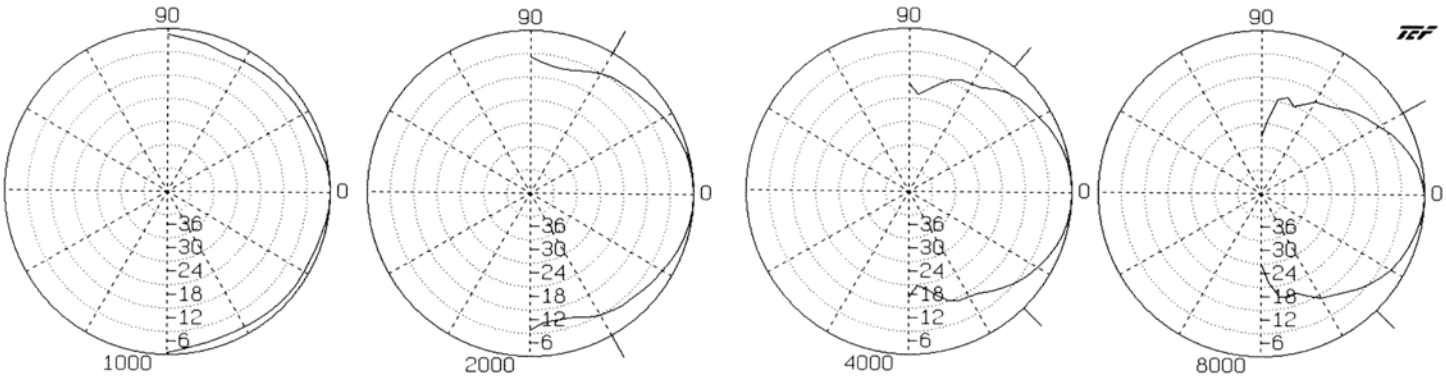
System	
Type	PoE+ Indoor IP Speaker System with LCD Display, Microphone and LED Flasher
Indicators	Network Status (On Back)
Frequency Response (+/- 5dB)	86Hz - 15.5kHz
Vertical Coverage	105° 800 Hz - 4 kHz
Horizontal Coverage	105° 800 Hz - 4 kHz
Directivity Factor (Q)	17 @ 2 kHz
Max SPL at 1 m (passive)	120 dB SPL Continuous / 123 dB SPL (peak 6 ohm)
General Purpose Interface	Two Trigger Inputs / One Relay Output (2A @ 30 VDC)
Transducers	
LF Transducer Qty and Size	8" (203mm)
HF Transducer Qty and Size	3" (76mm)
HF Crossover Frequency	2,800Hz, First Order
Voice Coil Size	1" (25mm)
Cone Material	Curvelinear, Treated Industrial Paper
Driver Protection	Built-In Limiter
Vertical Coverage:	120° 2kHz Octave Band
Horizontal Coverage:	120° 2kHz Octave Band
Directivity Factor (Q)	8 @ 2 kHz
Max SPL at 1 m (Passive)	98 dB SPL continuous / 102 dB SPL Peak
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
Microphone	
Sensitivity	Minus 35 (±4dB) / (0db = 1V/pa, 1kHz)
Impedance	Less than 2.2kΩ
Directivity	Omnidirectional
Frequency Range	20Hz – 20kHz
Standard Operation Voltage	2V
Max. Operation Voltage	10V
Current Consumption Max.	0.5 mA
Sensitivity Reduction Within	Minus 3dB @ 1.5V
S/N Ratio	More than 62dB
Audio Inputs and Outputs	
Input: Analog Audio Type(s)	One Unbalanced Line Level
Input: Analog Connectivity	Secured Screw Terminal Block
Input: Network Audio Type(s)	G.711 U-Law/A-Law and G.722 Capable / Dante and CobraNet
Input: Network Connectivity	RJ-45 female
Output: Analog Audio Type(s)	One Unbalanced 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	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
Flasher	
Flasher Type	LED
Flash Color Range	Red, Green, Blue, White, Purple, Orange, & Yellow
Flasher Illuminance (lux)	83 Red, 545 Green, 90 Blue, 570 White
Flash Rate(s)	Multi Speed Capable
Viewable Dimensions (HxW)	.5" (12mm) x 3.5" (89mm)
Control	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	IEEE802.3 10/100Base-T
PoE	IEEE802.3AF/AT Compliant
VLAN	IEEE802.1q Tagging
Protocols	
IP Addressing	DHCP/Static
Auto-Provisioning	HTTP/TFTP
Auto-Registration	HTTP/Service Location Protocol/IEDNet
Time	NTP or Host Server
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 UL62638
Ingress Protection	NA
Logo	One Color Print
Product Dimensions (HxWxD)	14.37 (365mm) x 12.87" (326.9mm) x 5.5" (139.7mm)
Shipping Dimensions (HxWxD)	15.5" (393.7mm) x 13.9" (353.06mm) x 5.5" (139.7mm)
Net Weight - lbs	TBA
Shipping Weight - lbs	TBA
Warranty Coverage	
Warranty Period	1 Year

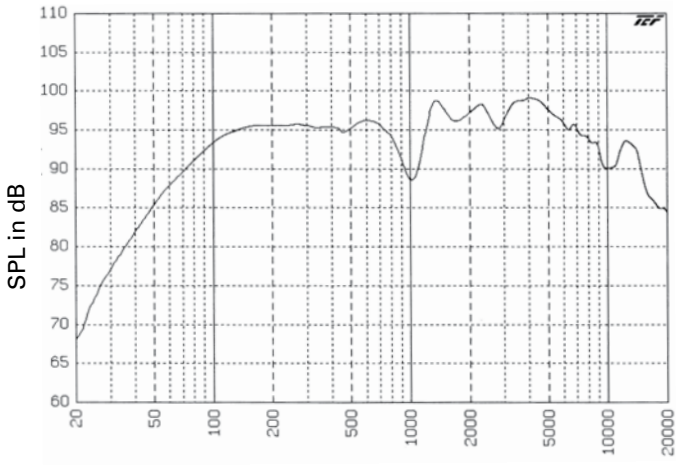
NOTES:

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 (-6dB)

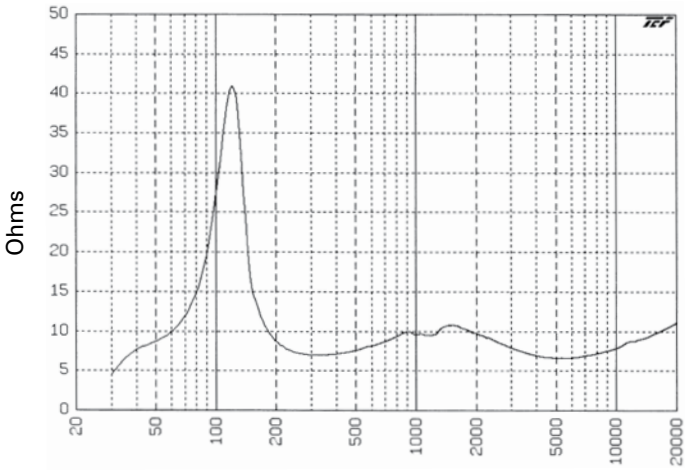


Frequency Response



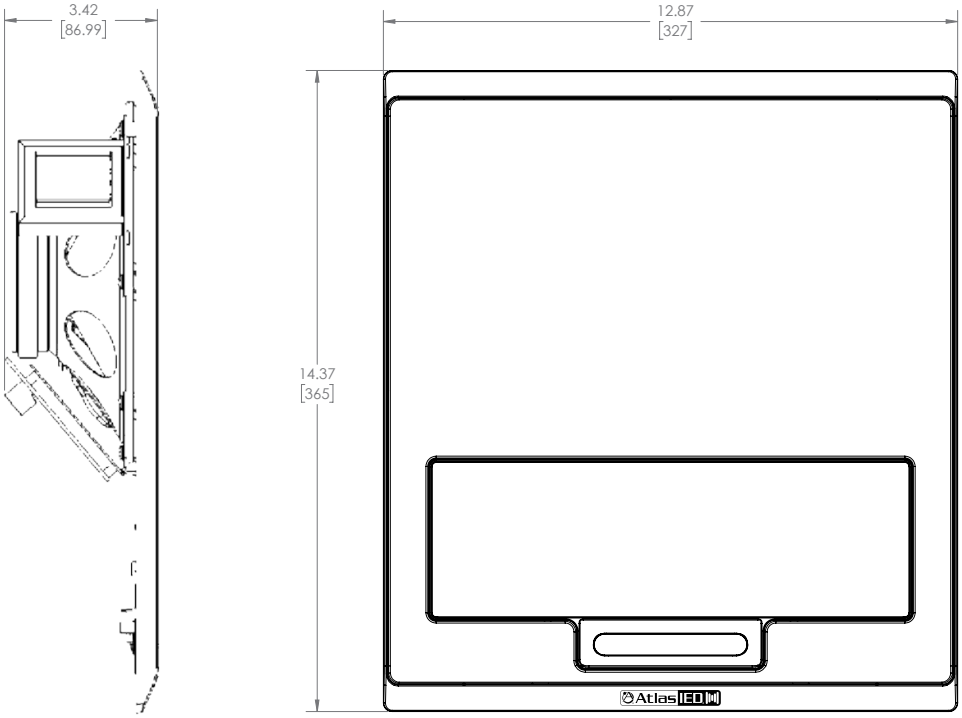
Frequency (Hz)

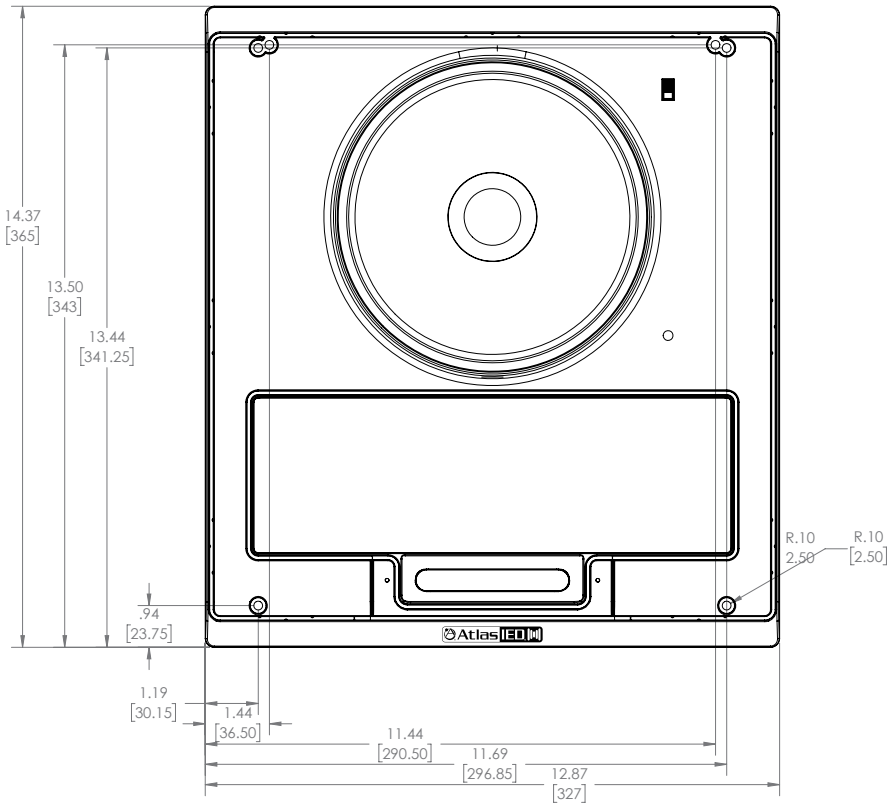
Impedance



Frequency (Hz) Octave Smoothing = 30.0%

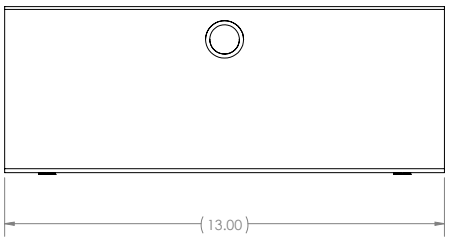
Dimensional Drawings

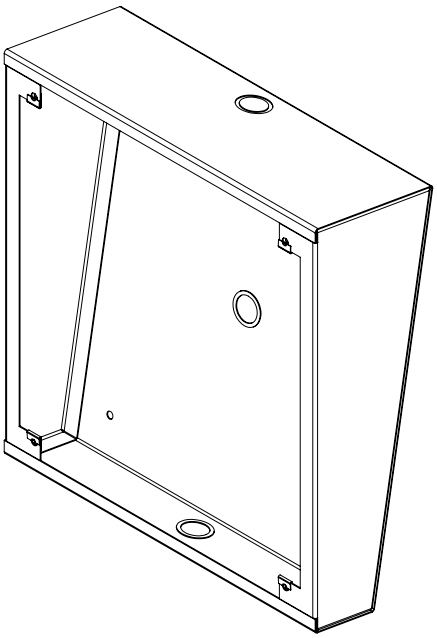


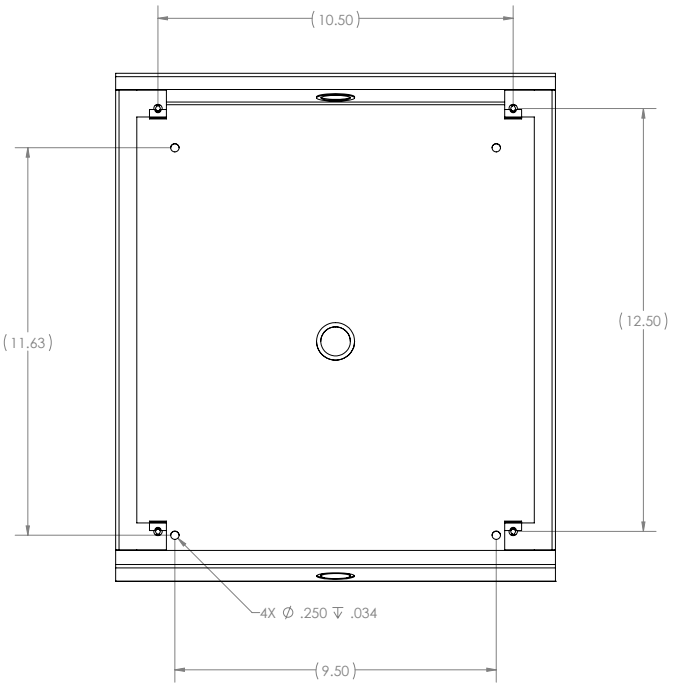


Optional Accessories

IP-SEA-SD

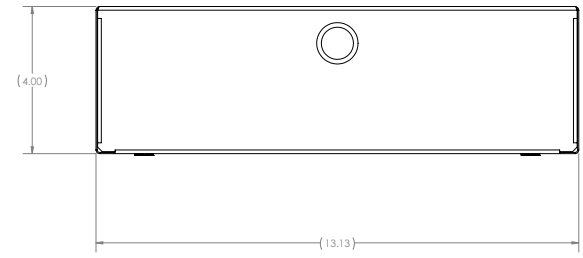


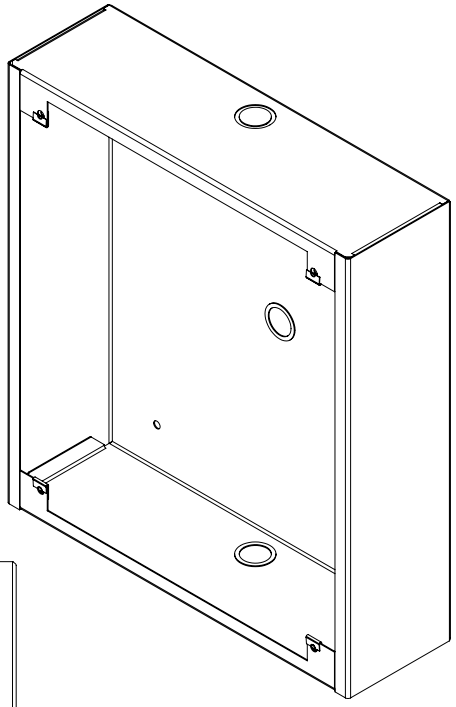


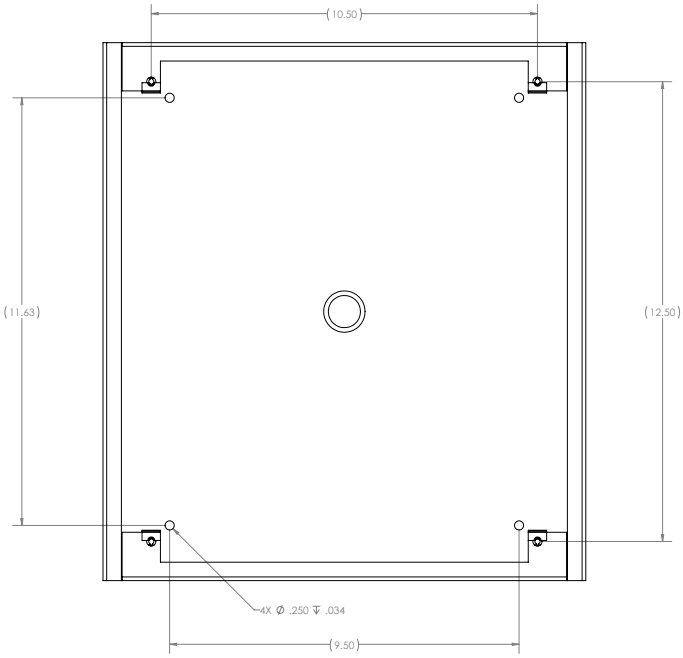


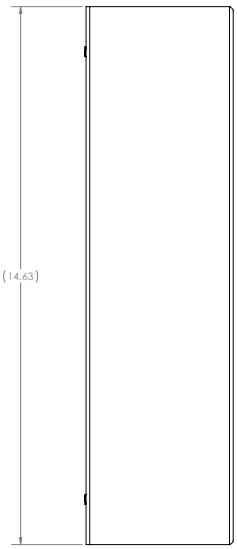
Optional Accessories

IP-SEST-SD



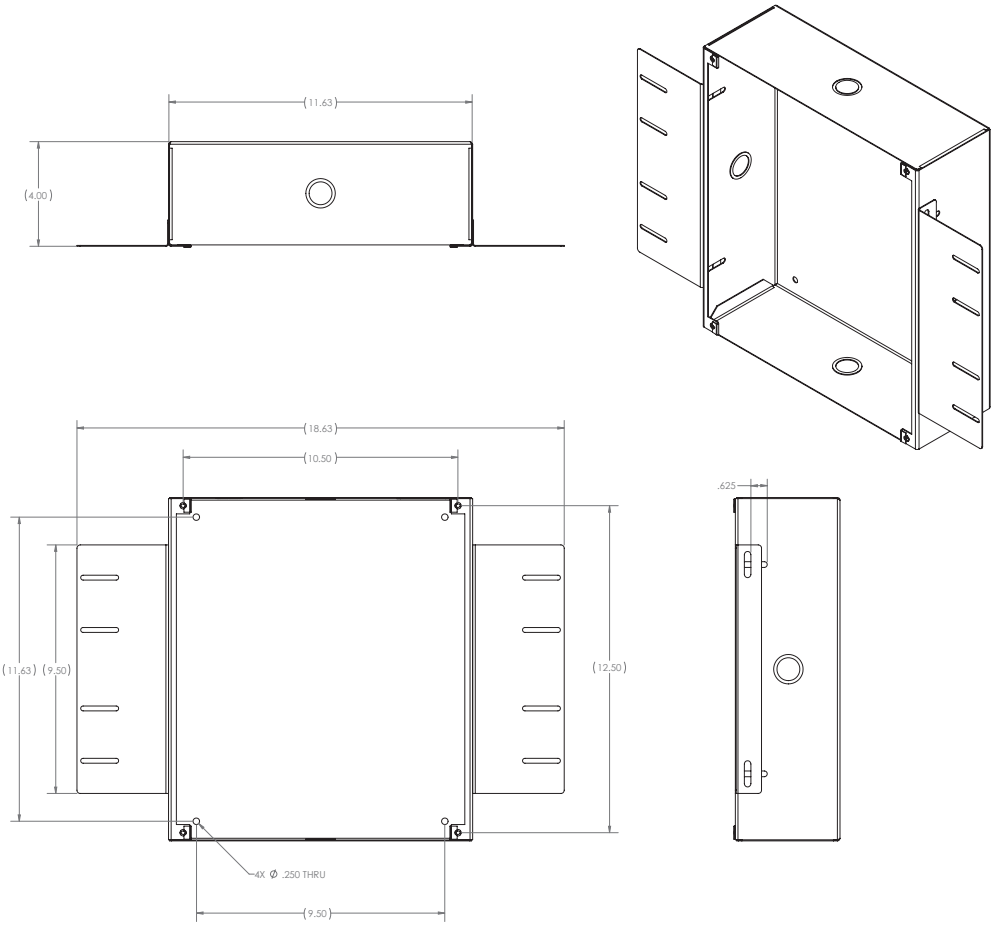






Optional Accessories

IP-FEST-SD



Architect and Engineer Specifications

The unit shall be AtlasIED model IP-SDFMLED. The speaker system shall include factory assembled speaker, IP addressable PCB amplifier/control, metal baffle, integrated microphone, LED display and LED flasher. The speaker shall be an 8" driver with a 10oz (260g) ceramic magnet and seamless cone. The impedance shall be 8 ohm and a voice coil diameter of 1" (25mm). The speaker dispersion shall be 105° (800Hz - 4kHz) and frequency response of 86Hz – 15.5kHz (±5dB). The max peak output at 1W/1m shall be 98dB 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 an integrated microphone to allow full duplex talkback communication functionality based upon chosen software platform.

The unit shall incorporate a LED display with viewable dimensions of 10.125" (2577mm) 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.

The unit shall incorporate a LED flasher with viewable dimensions of .5" (12mm) height x 3.5" (89mm) wide. The LEDs shall be able to produce RGB color spectrum with brightness of 310-lux (Red), 348-lux (Green), 352-lux (Blue). It shall have the capability of multi-speed flash rate and will be software controllable.

All control functionality shall be determined via software. The metal speaker baffle overall dimensions shall be 14.38" (365mm) x 12.88" (327mm) x 2.77" (70.36mm) HxWxD. Finish shall be neutral white electrostatic powder coat.

Optional enclosures shall include:

IP-SEA-SD	surface mount angled enclosure for IP-SDFMLED neutral white finish
IP-SEST-SD	surface mount straight enclosure for IP-SDFMLED neutral white finish
IP-FEST-SD	flush mount straight enclosure for IP-SDFMLED reclaimed powder coat finish