

IP-APX

PoE+ WEATHER RESISTANT CONSTANT DIRECTIVITY IP HORN WITH ROTATING BELL AND WALL/POLE MOUNT



TECHNICAL DATA SHEET

PRODUCT SUMMARY

AtlasIED IP-APX is a weather resistant constant directivity high-output IP horn with rotating bell and wall / pole mount. It compliments the Unified Communications (VoIP Communications) investment including on-premises and hosted infrastructure platforms so that announcements can be pushed to people and spaces beyond the world of desktop telephony communication, breaking any traditional audio-path barriers.

The AtlasIED IP-APX IP Endpoint features a 60° x 40° constant-dispersion pattern across the controlled frequency band of 1.25-10 kHz. The rotating bell pivots in precise 15° increments for exact on-site positioning of projection angles. A triple lock security mounting method saves installation time and provides long-term stability.

APPLICATIONS

AtlasIED IP-APX registers as a communication endpoint directly within Singlewire®, AtlasIED®, Syn-Apps® and Intrado® notification applications, supporting audio broadcast to enhance physical security while improving day-to-day communications through advanced alerting, bell schedules and pre-recorded & scheduled announcements, while leveraging the wide area network (WAN) or local area network (LAN) architecture.

AtlasIED IP-APX supports Call Manager publisher subscriber SIP Service call processing failover. This service provides remote location call-processing redundancy when access to the centralized Call Manager is interrupted because of a WAN outage. In Cisco® UMC environment, IPX endpoints can register to either Cisco's basic or advanced 3rd party SIP device service for paging functionality. IPX must use Cisco's advanced 3rd party SIP device service when registering to a publisher subscriber configuration.

IP-APX endpoint can register as a SIP device directly to a SIP server or VoIP Communications Manager for critical alerts and public address applications.

KEY FEATURES

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

Audio Codec Support

- G.711 u-law / a-law (16 kbit/s)
- G.729 Wideband Audio (64 kbits/s)

Auto Registration

- SLP for Singlewire Applications
- DNS SRV for Singlewire Applications
- DHCP Option 72 for Syn-Apps / Intrado Applications
- IEDNet+ for AtlasIED Applications

Static Configuration

- HTTP GUI for Static Configuration

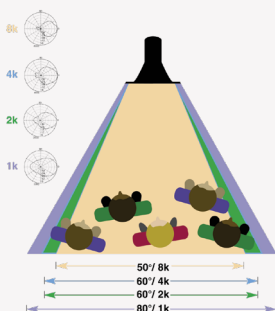
Audio Features

- Integrated Amplifier with Secondary 8Ω output
- Aux Audio Line-In Balanced (2.8Vpp 10K)
- Aux Audio Line-Out Balanced (2.8Vpp 10K)
- Can send 1 Static Multicast Stream (Line-in or Mic to Multicast Out)
- Can listen up to 10 Static Multicast Streams

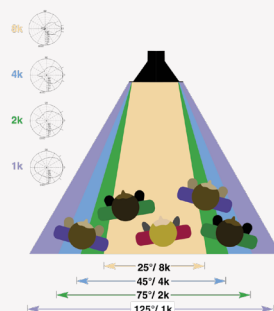
Additional Features

- 2 General Purpose Inputs
- 1 General Purpose Output (2A @ 30 VDC)
- Phone / Night Loud Ringer
- External Power Supply Option
- Highly Efficient Horn Speaker Provides Greater Output and Coverage

APX Beamwidth
Controlled Coverage
Across a Wide Freq. Range



Conventional Horn Beamwidth
Collapsing Coverage
Across a Wide Freq. Range



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AUDIO SPECIFICATIONS / PERFORMANCE

SYSTEM	
Type	PoE+ Weather Resistant Constant Directivity IP Horn with Rotating Bell and Wall / Pole Mount
Operation Temp	-20°C (-4°F) to 70°C (158°F)
Indicators	Network Status (On Control Board)
Frequency Response (+/- 5dB)	400 - 7,500 Hz (Nominal)
Vertical Coverage	40o (-6dB, 2000 Hz Octave Band)
Horizontal Coverage	60o (-6dB, 2000 Hz Octave Band)
Directivity Factor (Q)	26 @ 2 kHz
Max SPL at 1m	121dB at 25 Watts (Peak)
General Purpose Interface	Two Trigger Inputs / One Relay Output (2A @ 30 VDC)

TRANSDUCERS	
LF Transducer Qty and Size	N/A
HF Transducer Qty and Size	(1) 14.62" (371.35mm) X 10.13" (257.3mm) Bell with Double Entrant Compression Driver
HF Crossover Frequency	400 Hz
Voice Coil Size	1.25" (32mm)
Cone Material	High-Impact, Neutral- Grey Polycarbonate Resin with UV Light Inhibitor
Sensitivity	107dB at 1 Watt / 1 Meter Average

AMPLIFICATION	
Type	Single-Channel Class D Topology with Primary and Secondary Outputs
AC Power Input	PoE+ and External 24VDC
Power Rating (RMS)	25 Watts Max (802.3at)
THD	<0.2%
Cooling	Passive / Convection

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: Multicast Permanent Stream	Registered Subscriber/s for up to 10 Different Streams
Input: Network Connectivity	RJ-45 female
Output: Analog Audio Type(s)	One Balanced Line Level
Output: Multicast Permanent Stream	One Broadcast Using Line-In or Integrated Microphone *** Note: Audio Does Not Play out of the Sending Device***
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, 25-Watts (802.3at)
Output: Speaker Connectivity	Primary and Slave Secured Screw Terminal Block

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AUDIO SPECIFICATIONS / PERFORMANCE (CONTINUED)

SOFTWARE

AtlasIED GCK Compatible Version	7.0+
InformaCast Advanced Compatible Version	4.0+
InformaCast Fusion Compatible Version	3.0+
Syn-Apps SA-Announce Compatible Versions	9.0.18+
Intrado Revolution Compatible Versions	V2017.3.1+

NETWORK

Ethernet	IEEE 802.3 10/100Base-T
POE	IEEE 802.3at Compliant
VLAN	IEEE 802.1q Tagging

PROTOCOLS

IP Addressing	DHCP / Static
LLDP-MED	PoE Power Negotiation
Auto-Registration	HTTP / Service Location Protocol / DNS SRV / IEDNet+ / DHCP Option 72 and Option 150
Time	NTP or Host Server
Telephony	SIP

ENCLOSURE

Color	Pantone Warm Gray 3 C - RAL 7044
Grille Material	N/A
Baffle Material	N/A
Mounting / Rigging Provisions	Sturdy Die-Cast Base May Be Mounted to 1-gang, 2-gang, and 4" Square E.O. or Band to Pole
Safety Agency Ratings	ETL Listed to Comply with 62368-1, CSA C22.2 #62368-1, IEC 62368-1 CB Scheme and FCC
Ingress Protection	IP-56
Logo	Blue
Product Dimensions (HxWxD)	8.02" x 14.61" x 13.86" (204mm x 371mm x 352mm)
Shipping Dimensions (HxWxD)	14.25" x 14.875" x 10.32" (362mm x 377.8 mm x 262.1mm)
Net Weight - lbs	6.45 lbs (2.92 kg)
Shipping Weight - lbs	7.75 lbs (3.51kg)

WARRANTY COVERAGE

Warranty Period	5 Year
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NOTES:

1. Sensitivity: Half space pink noise measurement at 6ft (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.

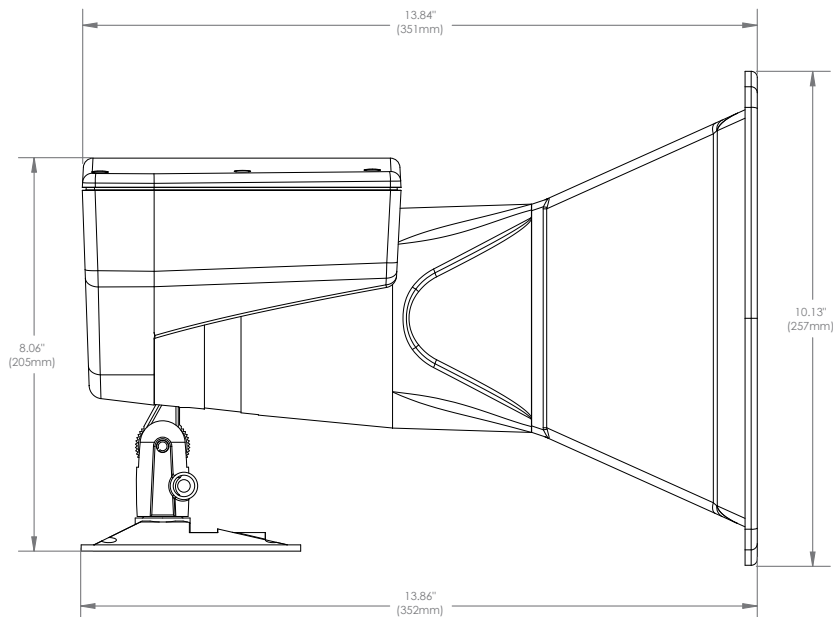
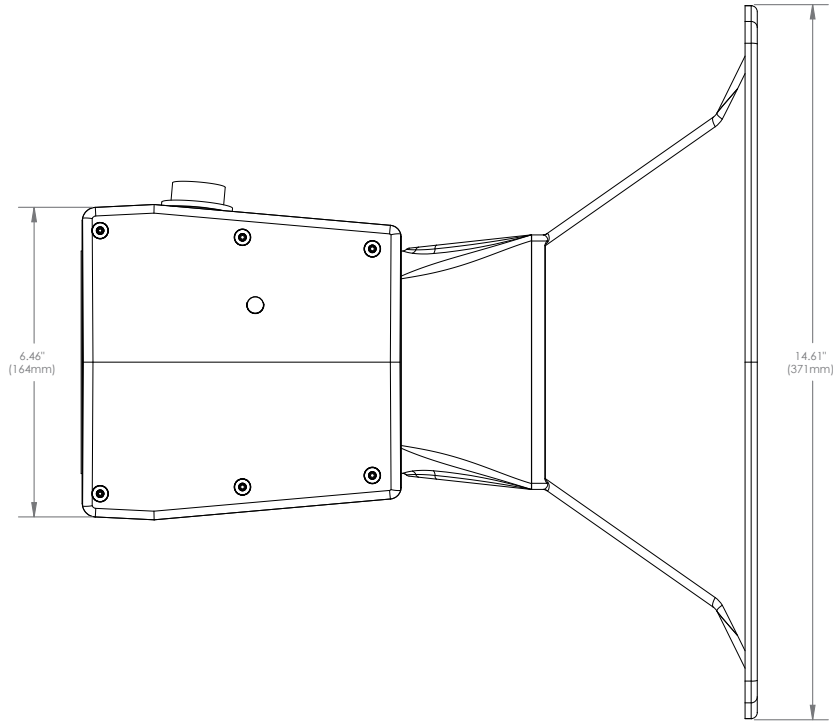
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DIMENSIONAL DRAWING



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ARCHITECT AND ENGINEER SPECS

The unit shall be AtlasIED model IP-APX. The PoE+ weather resistant constant directivity IP Horn with rotating bell system shall include factory assembled rotating bell, IP addressable PCB amplifier / control, sturdy die-cast base and an IP56 rating.

The weather resistant constant directivity IP Horn with rotating bell system shall have an overall frequency response of 400-7,500 Hz (nominal), 500-5000 Hz (± 5 dB). Sound pressure level shall be 107dB at 1 Watt / 1 meter, and max peak output at 1m shall be 121dB SPL. The impedance shall be 8 ohm and a voice coil diameter of 1.25" (32mm).

The horn's rotating bell shall provide a 60° x 40° constant-dispersion pattern across the controlled frequency band of 1.25-10 kHz. The rotating bell shall include pivots in precise 15° increments for exact on-site positioning of projection angles.

The amplifier / control board shall incorporate conformal coating to protect against moisture, dust, chemicals, and temperature extremes. 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. The secondary output shall share the same factory EQ and crossover settings as the primary output to support an optional passive speaker of the same type. Interconnect shall be via female water-resistant RJ-45 connector mounted to the side of the enclosure.

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 receive announcements and messages using dynamically routed data on a standard Ethernet network. It shall include a Graphical User Interface (GUI) for SIP configuration. The SIP implementation shall support standards G.711, G.722 and RTP protocols. The GUI shall configure and manage logic inputs, relay outputs, and auxiliary audio input.

All control functionalities shall be determined via software. It shall be compatible with AtlasIED's Discovery Tool, AtlasIED's GCK, Syn-Apps' SA-Announce or Intrado's Revolution, Singlewire's InformaCast software platforms and SIP standalone.

The PoE+ weather resistant constant directivity IP Horn with rotating bell system shall be Molded of High-Impact, Neutral- Grey Polycarbonate Resin with UV Light Inhibitor Preventing Embrittlement or Discoloration and shall incorporate a Sturdy Die-Cast Base that may be mounted to 1-gang, 2-gang, and 4" Square E.O. or Band to Pole. The overall dimensions shall be H 8" x W 14 5/8" x D 13 7/8".