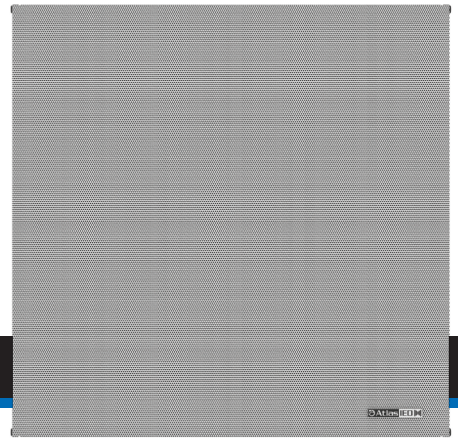


# DA-22SYS

## INDOOR 2' X 2' SUSPENDED CEILING MOUNT DANTE POE IP SPEAKER

### TECHNICAL DATA SHEET



### PRODUCT SUMMARY

AtlasIED DA-22SYS is a 2' x 2' suspended ceiling mount IP PoE amplified loudspeaker featuring Audinate's Dante digital audio transport platform.

AtlasIED DA-22SYS speakers consist of a factory assembled speaker and baffle with PCB amplifier / control board. The DA-22SYS amplifier is capable of producing up to 15-watts RMS of amplification in single channel mode or up to 2 x 10-watts in dual channel mode with IEEE 802.3at compliant PoE switches and 10-watts single channel mode or 2 x 5-watts in dual channel mode with PoE power. Interconnection is via a top panel mounted female RJ-45 connector. All models are compatible with Audinate's Dante™ digital audio transport platform.

The DA-22SYS features user configurable amplifier modes, Input EQ, Level Control, and Masking with room tuning EQ. All controls are done via the AtlasIED IP Discovery and Control software. Through this software, the active IP speaker can be discovered on the network with the ability to custom name each speaker with a location tag for system management. The AtlasIED control software features an audible ping-me locator making it convenient to physically locate the speaker. System tuning can be done on an Individual speaker or by an assigned group.

The DA-22SYS ships configured for single speaker use. It can also be configured to Dual mode to drive a second passive speaker of the same type. When the DA-22SYS amplifier is configured to Dual mode the amplifier power is split between the DA-22SYS and the 8-ohm passive speaker. The secondary speaker output shares the same factory EQ settings as the DA-22SYS. Amplifier levels can be adjusted separately.

The DA-22SYS includes a top cable access plate that is easily removed for installation. The cover also completely conceals the Ethernet cable terminations.

### APPLICATIONS

AtlasIED DA-22SYS is used where a network PoE Dante digital audio endpoint is required to transmit a page, playback message or supply background music.

### KEY FEATURES

- Extreme High Efficiency (96dB 1W/1m)
- Wide Frequency Response of 70Hz - 15.5kHz (5dB) is Perfect for Speech and General Messaging Playback
- 8" (203mm) Coaxial
- Integrated PoE Amplifier
- Secondary Amplifier Output for 8Ω Speaker
- Audinate Dante Digital Audio Amplifier Configurations
- AES67 Compatible

### Amplifier Configurations

- Single Channel Mode
- Dual Channel Mode

### DSP & Control

- Individual Channel Level Control
- Dante Input Level, EQ & Limiter
- Sound Masking Generator, Level & EQ
- Find Me Locator Tone

### Unique Features

- Create Custom Identification Names
- Group Control & Updating
- Status & Log Reporting

### Network Features

- PoE or PoE+ Select or Auto Detect
- Dynamic or Static IP Address
- IEEE 802.3af Compliant
- Auto Registration with Dante Controller and AtlasIED Discovery Software

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### AUDIO SPECIFICATIONS / PERFORMANCE

SYSTEM	
Type	PoE / PoE+ Indoor 2' x 2' Suspended Ceiling Mount IP Speaker
Operation Mode	Self Powered
Indicators	Network Status (On RJ-45)
Frequency Response (+/- 5dB)	86Hz - 15.5kHz
Vertical Coverage	105° (2kHz Octave Band, -6dB Points)
Horizontal Coverage	105° (2kHz Octave Band, -6dB Points)
Directivity Factor (Q)	17 @ 2 kHz
Max SPL at 1m	110dB SPL Continuous
Recommended Signal Processing	Built-In Processing

TRANSDUCERS	
LF Transducer Qty and Size	(1) 8" (203mm)
HF Transducer Qty and Size	(1) 1" (26mm)
HF Crossover Frequency	2,800Hz, First Order
Cone Material	Curvilinear, Treated Industrial Paper
Sensitivity	98dB SPL Average
Driver Protection	Active Limiter

AMPLIFICATION	
Type	Two-Channel Class D Topology
Power Input	PoE (IEEE 802.3af) / PoE+ (IEEE 802.3at)
Single Ch Mode, Power Rating (RMS) PoE (IEEE 802.3AF)	10 Watts Max
Two Ch Mode, Power Rating (RMS) PoE (IEEE 802.3AF)	5 Watts Max, plus 5W @ 8 Ohm Paralleled Output
Single Ch Mode, Power Rating (RMS) PoE+ (IEEE 802.3AT)	15 Watts Max
Two Ch Mode, Power Rating (RMS) PoE+ (IEEE 802.3AT)	10 Watts Max, plus 10W @ 8 Ohm Paralleled Output
THD	<.02%
Cooling	Passive / Convection
Driver Protection	Built-In Limiter

AUDIO INPUTS AND OUTPUTS	
Input: Network Audio Type(s)	Audinate Dante, AES67
Input: Network Connectivity	RJ-45 Female
Output: Parallel Secondary Amplifier Output	PCB Mount 2 Position Screw Terminal
Output: Speaker Connectivity	Two x Secured Screw Terminal Block

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# DA-22SYS

## INDOOR 2' X 2' SUSPENDED CEILING MOUNT DANTE POE IP SPEAKER

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### SPECIFICATIONS / PERFORMANCE (CONTINUED)

SOFTWARE	
AtlasIED Discovery & Control Software	Discover, Status, Fault Report, User Setup & Control
Audinate Dante Controller	Network Audio Routing
USER CONTROL ELEMENTS	
Amplifier Operation Mode	Single Unit Mode or Two Channel Mode (Parallel Secondary Output)
Login	Username & Password
IP Mode	Static or DHCP
Product Locator	Audible Find Me Ping
Dante Input	Parametric EQ, 3 Filters Hi-Pass Filter Input Limiter Level
Amplifier Level	Ch 1 & CH 2
Masking	1/3 Octave EQ Hi & Lo Pass Filter Level
File Export	Settings File Device Profile
File Input	Settings File Device Profile
NETWORK	
Ethernet	IEEE 802.3 10/100Base-T
PoE / PoE+	IEEE 802.3 AF/AT Compliant
PROTOCOLS	
IP Addressing	DHCP / Static
Auto-Registration	Dante Controller, AtlasIED Discovery & Control Software
Digital Audio	Audinate Dante Audio
Time	NTP
MECHANICAL	
Color	White
Grille Material	Powder Coated Steel with 22-Gauge Perforated Steel
Baffle Material	19-Gauge Corrosion-Resistant Zinc Plated Steel
Mounting / Rigging Provisions	Lay-In Into a Reflected Ceiling Grid
Logo	Black and Silver
Product Dimensions (HxWxD)	23.68" x 24.10" x 5.06" (601mm x 612 mm x 129mm)
Shipping Dimensions (HxWxD)	25.5" x 25.5" x 8.38" (648mm x 648mm x 213mm)
Net Weight	15.12 lbs (6.86kg)
Shipping Weight	20.91 lbs (9.48kg)

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# DA-22SYS

INDOOR 2' X 2' SUSPENDED CEILING MOUNT  
DANTE POE IP SPEAKER

TECHNICAL DATA SHEET



## SPECIFICATIONS / PERFORMANCE (CONTINUED)

### SAFETY RATINGS

Safety Agency Ratings	ETL Listed to Comply with 62368-1, CSA C22.2 #62368-1, IEC 62368-1 CB Scheme and FCC; UL2043
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### WARRANTY COVERAGE

Warranty Period	1 Year
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### 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.

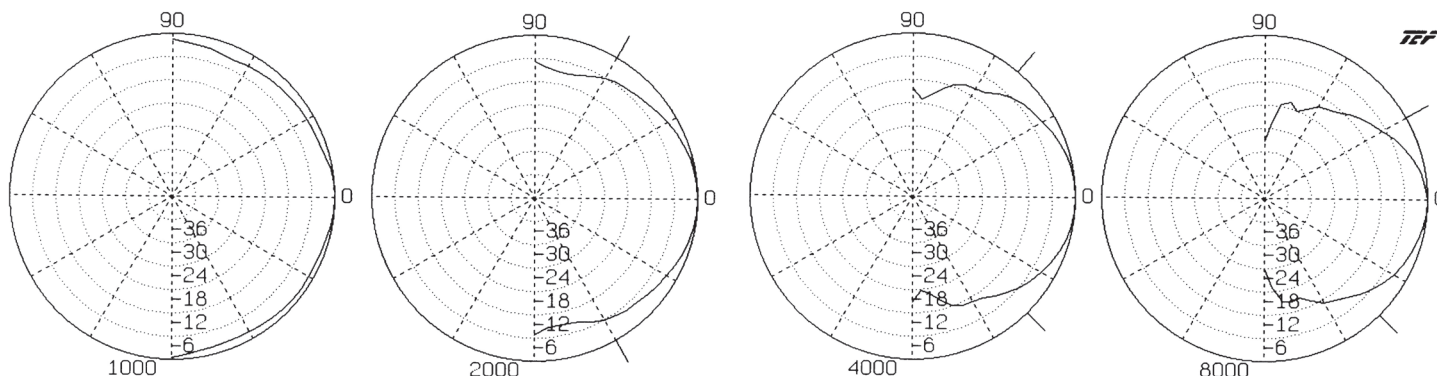
# DA-22SYS

INDOOR 2' X 2' SUSPENDED CEILING MOUNT  
DANTE POE IP SPEAKER

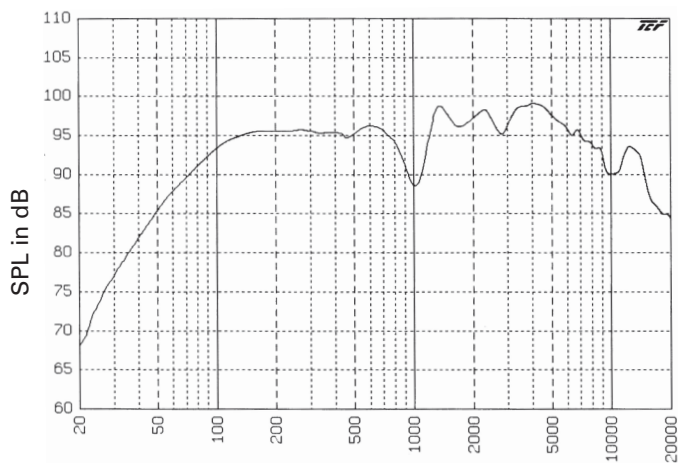
TECHNICAL DATA SHEET



Polars Are Normalized To Zero On Axis (-6dB)

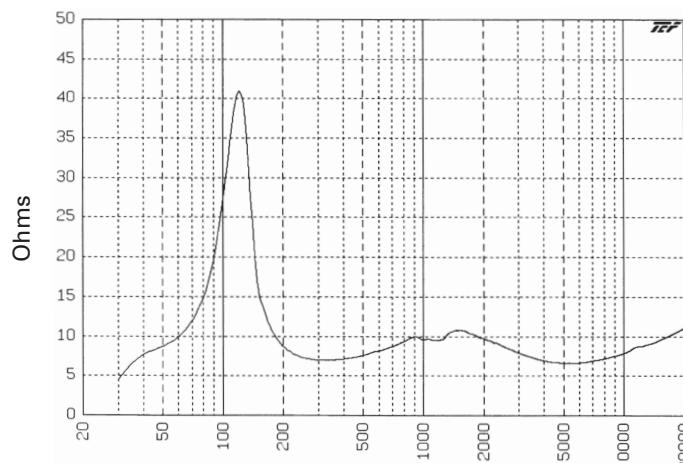


## Frequency Response



Frequency (Hz)

## Impedance

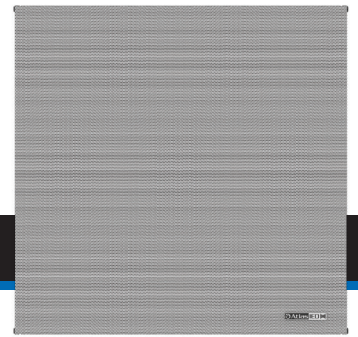


Frequency (Hz) Octave Smoothing = 30.0%

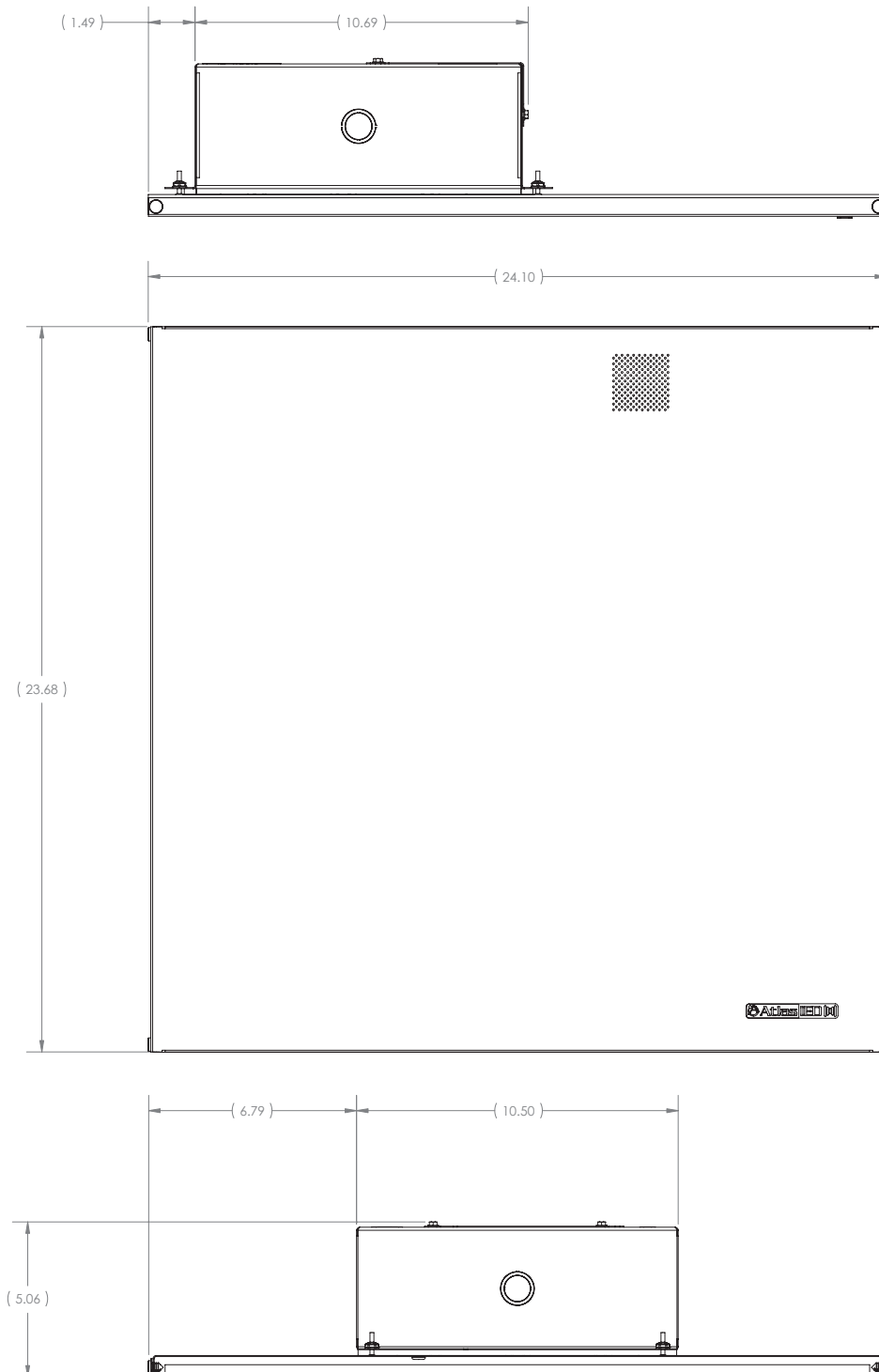
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INDOOR 2' X 2' SUSPENDED CEILING MOUNT  
DANTE POE IP SPEAKER

TECHNICAL DATA SHEET



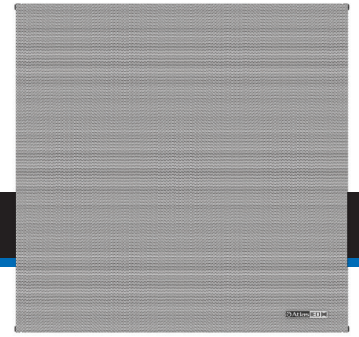
## DIMENSIONAL DRAWING



# DA-22SYS

## INDOOR 2' X 2' SUSPENDED CEILING MOUNT DANTE POE IP SPEAKER

### TECHNICAL DATA SHEET



### ARCHITECT AND ENGINEER SPECS

The unit shall be AtlasIED model DA-22SYS. The PoE+ indoor 2' x 2' suspended ceiling mount IP endpoint speaker system shall include factory assembled speaker, IP addressable PCB amplifier / control, and steel perf grille.

The speaker shall be an 8" coaxial driver with a low-frequency reproducer cone that shall be a full 8" (203mm) in diameter and a high frequency reproducer cone that shall be 3" (76mm) in diameter. The woofer shall have a 10oz. (260g) ceramic magnet; the tweeter shall have a 2.35oz. (67g) ceramic magnet. The two reproducer sections shall be coupled through a built-in crossover network.

The crossover frequency shall be at 2800Hz. The speaker dispersion shall be 105° and frequency response range shall be 86Hz 15.5kHz, (±5dB). Sensitivity shall be 98dB at 1 Watt / 1 meter. Voice coil impedance shall be 8Ω. Low frequency voice coil diameter shall be 1" (25mm) and operate in a magnet field of at least 10,600 gauss. The maximum depth of the loudspeaker shall not exceed 5.06" (129mm).

The amplifier / control board shall receive Audinate Dante audio & control protocol that can be routed data on a standard Ethernet network. It shall

include a dual-channel Class D topology amplifier with primary and secondary outputs capable of producing 20-Watts RMS when using an IEEE 802.3at compatible PoE+ switch and 10-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 DA-22SYS shall ship configured for single speaker use. It can also be configured to Dual mode to drive a second passive speaker of the same type. When the DA-22SYS amplifier is configured to Dual mode the amplifier power is split between the DA-22SYS and the 8-ohm passive speaker. The secondary speaker output shares the same factory EQ settings as the DA-22SYS. Amplifier levels can be adjusted separately.

All control functionalities shall be determined via AtlasIED software. The PoE+ indoor 2' x 2' suspended ceiling mount IP Dante endpoint speaker system overall dimensions shall be 23.68" x 24.1" x 5.06" (601mm x 612mm x 128mm). Finish shall be neutral white electrostatic powder coat micro perforated grille.

The AtlasIED model shall be call the DA-22SYS.