

### IP Paging Adapter for Traditional Analog Amplifiers

Connect the 8301 IP Paging Adapter to legacy amplifiers to bridge analog paging systems to IP environments. The 8301 offers multicast and scheduling capabilities, making it a valuable resource in hybrid and IP environments.



The 8301 IP Paging Adapter is a SIP endpoint that integrates existing traditional paging infrastructure into a VoIP environment. Algo's paging adapter emulates a page port similar to what is found on a legacy PBX to connect directly to an analog amplifier, offering a simple and easy interface to a VoIP phone system as a SIP extension and multicast endpoint.

As a SIP-compliant device, the 8301 is compatible with most leading UC systems. While often used to bridge IP to traditional amplifiers, the 8301 also scales IP environments, acting as a multicast sender to other Algo IP endpoints grouped into zones. With wideband audio and an isolated balanced line output, the 8301 can deliver clear, crisp audio to play over both IP and analog speakers.

A common use for the 8301 is as a scheduler, which can function in both traditional and IP environments. Users can configure the 8301 to set timers for bells, automated announcements, or any other tone or usage. With 1 GB of internal memory, any selection of sound can be played by uploading the desired audio file.

The 8301 is easily managed directly via the web interface. Paired with an Algo device management tool, the 8301 can be monitored and managed in an Algo ecosystem along with any number or types of devices over a LAN or on the cloud.

#### FEATURES

- Isolated and balanced line output to eliminate hum / noise to amplifier
- Wideband HD audio (G.722 voice codec) for high intelligibility speech
- Secure SIP using TLS and SRTP
- Configurable via user-friendly web interface or auto-provisioning
- Customizable audio files for emergency notification and alerting
- Configure up to 50 page zones
- PoE powered (IEEE 802.3af)
- Dedicated audio/music input (3.5 mm jack)

#### APPLICATIONS

- Ensure seamless connectivity between IP and legacy infrastructure.
- Deliver clear, intelligible voice paging solutions to any size building or enterprise.
- Easily connect the 8301 to an emergency communication system to deliver highly noticeable notifications and alerts.
- Leverage multicast to extend communication reach to IP speakers while broadcasting to analog speakers via the amplifier connected to the 8301.
- Schedule bells, tones, and automated announcements for schools, retail, and healthcare facilities.

POWER	
POWER SOURCE	PoE (IEEE 802.3af Class 0) 48 V, 15.4 W
MAX POWER (AT DEVICE)	4 W
IDLE POWER	2 W
SIP	
SIP EXTENSIONS	<ul style="list-style-type: none"> <li>• 50 Page (Capable of talkback when appropriate speaker and microphone connected)</li> <li>• 10 Emergency Alert</li> <li>• 10 Ring</li> </ul>
SIP SIGNALLING/ TRANSPORT PROTOCOLS	UDP, TCP, RTP
SECURITY	TLS, SRTP, Mutual Authentication
AUDIO CODECS	G.711 u-law, G.711 A-law, G.722 Wideband
MULTICAST	
RTP MULTICAST	Send and Receive 50 Zones
AUDIO CODECS	G.711 u-law, G.711 A-law, G.722 Wideband, Opus Fullband
COMPATIBILITY	
THIRD PARTIES	<ul style="list-style-type: none"> <li>• RESTful API</li> <li>• Poly Group Page</li> <li>• Singlewire InformaCast (additional license required)</li> <li>• Syn-Apps Revolution</li> <li>• Microsoft Teams</li> </ul>
CONFIGURATION & PROVISIONING	
CONFIGURATION	Web interface or provisioning server
WEB INTERFACE	HTTP, HTTPS
PROVISIONING	TFTP, FTP, HTTP, HTTPS DHCP Options 66, 150, 160 Reboot via SIP 'check-sync'
ZTP	Supported
SUPERVISION	Compatible with Algo Device Mangement Platform (ADMP), Algo 8300 IP Controller, any third-party SNMP monitoring software, and RTCP
NETWORKING	
NETWORKING	IPv4, IPv6, DHCP, VLAN, MDNS
LINK LAYER	LLDP, CDP
SECURITY	IEEE 802.1X
QOS	DSCP
NAT	STUN, TURN, CRLF Keep Alive, SIP Outbound
ADDRESS RESOLUTION	DNS, SRV Record
REDUNDANCY	Secondary and tertiary SIP server
TIME	NTP Server (up to four)
AUDIO	
MICROPHONE	Connection available for external microphone
AUDIO MEMORY & FORMAT	1 GByte audio storage for WAV or MP3 files
AUDIO CONTROLS	Volume, AGC, Latency, LF Cut
ANTI-FEEDBACK DELAY	Cache to memory and release
AUDIO DELAY	Programmable 1-1000 ms synchronization delay
INPUT/OUTPUT	
RELAY INPUT	Normally open or normally closed dry contact with supervision. Compatible with Algo 1202 Call Button, 1203 Call Switch, 1204 Volume Control, 1205 Audio Interface, or EOL resistor termination.
RELAY OUTPUT	Max 30 V 50 mA (normally open)
AUX IN	3.5 mm jack for analog line level input for music input. Non-isolated.
AUX OUT	3.5 mm jack for analog line level input for compatible PC speakers or headset. Non isolated.

LINE IN MINI-XLR	Balanced and isolated audio (page or music) input can be configured for pass-through to Line Out (when paging is idle), or for broadcast via multicast.
LINE OUT MINI-XLR	Balanced and isolated audio output to external amplifier. Locking Mini-XLR female to standard XLR male cable available. Output level defined using web interface.
TERMINAL BLOCK LINE IN	Balanced and isolated wire pair input parallel to Mini-XLR line in (polarity independent).
TERMINAL BLOCK LINE OUT	Balanced and isolated wire pair output to external amplifier. Parallel to Mini-XLR line out (polarity independent).

### RELAY INPUT CURRENT DRAW DETECTION

THRESHOLD	ACTIVE	IDLE	TAMPER
NORMALLY OPEN	> 4 mA	< 4 mA	N/A
NORMALLY OPEN WITH SUPERVISION	> 20 mAv	4-20 mA	< 4 mA
NORMALLY CLOSED	< 4 mA	> 4 mA	N/A
NORMALLY CLOSED WITH SUPERVISION	4-20 mA	> 20 mA	< 4 mA
NOMINAL 12 V SOURCE, CURRENT LIMITED TO 40 MA	Typical supervision resistor value = 1 k Ohm		

### ENVIRONMENTAL & MECHANICAL

ENVIRONMENTAL	0 to +40 deg C (32 to 104 deg F); 10-95% RH non-condensing. Dry indoor locations only.
DIMENSIONS (PRODUCT)	6.75" x 4.3" x 1.18" (17.2 cm x 10.9 cm x 3.0 cm)
WEIGHT (PRODUCT)	0.9 lbs (0.4 kg)
WEIGHT (SHIPPING)	1.5 lbs (0.7 kg)
MOUNTING	Snap mounting bracket included
COMPLIANCE	
RoHS, CE, FCC Class A, CISPR 22 Class A, CISPR 24, CSA/UL (USA & Canada), EN60950	



### ORDERING CODES:

- 8301** IP Paging Adapter and Scheduler
- 8301-IC** IP Paging Adapter and Scheduler InformaCast

### COMPATIBLE ACCESSORIES:

- 1202** Customer/Emergency Assistance Button
- 1203** Wall Switch Single Gang Blue LED



1202



1203



Balanced Audio Cables:  
2504 Output Mini-XLR Female to XLR Male  
2505 Input Mini-XLR Male to XLR Female  
Other cables available on request

