

Algo SIP Alerter 8180 (G2)



Product Name: Algo SIP Alerter 8180 (G2)

Manufacturer: Algo

Model Number: Algo8180

Algo 8180 (G2) IP Loud Ringer, SIP Speaker, & Voice Paging Device

The Algo 8180 SIP Audio Alerter is a wall mount IP speaker for voice paging, emergency alerting and loud ringing applications. The speaker is a fully compliant 3rd party SIP endpoint. As a result, the 8180 IP speaker is compatible with most hosted / cloud and premise-based VoIP telephone systems. Algo 8180 Key Benefits

- Gen 2 Public address (PA) IP speaker.
- Secure SIP using TLS and SRTP.
- Multicast scalable. Wideband HD voice for high intelligibility speech.
- Dynamic volume control responsive to ambient noise levels.
- Talkback capable speaker.
- Customize WAV files for emergency notification / alerting and telephone loud ringing.
- Configuration via user friendly web interface or auto-provisioning.
- PoE (IEEE 802.3af).
- Ideal for a school or college classroom, office, lunch room, kitchen, restaurant, etc.

The advanced features of the 8180 include SoundSure technology which automatically adjusts loud ring volume to compensate for background ambient noise. For environments with variable noise levels (restaurants, workshops, classrooms etc) the 8180 can step up the volume when necessary to be heard and provide a more comfortable level during quiet periods. Outputs for external speaker, slave amplifier, or visual alerter plus multicasting capability enable many more options to enhance notification and alert capabilities. Configuration is possible using the feature buttons or web interface.

Wideband IP Speaker The 8180 SIP Audio Alerter supports the Wideband G.722 HD voice codec. Consequently, there is high intelligibility and clarity of audio from the speaker for IP paging of voice announcements and emergency notification. The result is better STI-PA scores, which is important in meeting standards such as NFPA 72 and NEMA SB-40 for Emergency Communication in Education.

IP Loud Ringer The Ring extension on the 8180 is used for loud ringing / night bell applications. The 8180 will play a ring tone WAV file saved in 1GB device memory when this extension is called. Typically the speaker will be configured in a ring group to include a telephone(s). The WAV file will play for the duration of the ring event until the call is answered. Several default ring tones are available in 8180, however, custom WAV files can be uploaded to the device. Up to 10 Ring extensions are available to register on a single speaker for this purpose, thereby allowing one speaker to act as a loud ringer for several telephones by configuring different ring groups for each registered Ring extension. The 8180 is typically eight times louder than a telephone speaker for loud ringing. If the optional 8 ohm analog weatherproof 1186 Horn Speaker is combined with the 8180 speaker then the volume is twenty times louder for loud ringing. Note: The same performance is also achieved using the outdoor rated 8186 SIP Horn Speaker as an all-in-one PoE solution. Where audible and visual telephone ring alerting is required, the 8180 can be combined with an Algo strobe light using multicast or a relay. Available outputs on the 8180 include: external speaker (8 ohm), audio output to bridge to an analog amplifier, and a relay input or output for interfacing an accessory (e.g. Algo strobe light or visual alerter). Note: The 8180's audio output is not isolated and balanced. For an isolated and balanced output to eliminate the possibility of hum / noise use the 8301 SIP Paging Adapter & Scheduler.

Scale Algo IP Paging Speakers with Multicast The 8180 SIP Audio Alerter supports multicast send or receive. As a result, many Algo IP speakers can be deployed to cover any size building, campus (e.g., classrooms in a school, college or university) or enterprise. There is no limit to the number of devices part of a multicast, and a minimum of network traffic activity is utilized. A single registered SIP Audio Alerter can be configured to multicast to any number and

Algo SIP Alerter 8180 (G2)

mix of Algo IP speakers, strobe lights, paging adapters and multicast supported IP telephones. Multicast provides cost effective scalability using a minimum of SIP registered endpoints, as only the endpoint designated to send the multicast needs to be registered. Devices configured to receive the multicast do not need registration. Any combination and number of Algo IP endpoints can be configured as a multicast for emergency alerting to cover any size room, building, campus or enterprise. Support is available for RTP multicast, in addition to Polycom Group Page, Singlewire InformaCast (part no. 8180-IC) and Syn-Apps Revolution. Using Multicast for Zone Paging Multicast zone paging for up to 50 zones can be configured from a single 8180 speaker. Zones can be selected one of two ways. One option is to map multicast page zones to individual SIP extensions on the speaker. Fifty (50) page extensions are available for this purpose. Alternatively, in order to minimize SIP registrations, multicast page zones can be configured in the SIP Audio Alerter as a DTMF key press selection using the dial pad of telephone making the page call. Note: Additional page zones can be configured by registering individual Algo IP speakers for specific room paging (e.g. school classroom). Speakers with SIP registrations can also be configured to be a member / receiver of multicast zones. Dynamic Volume Control & Talkback Speaker volume can be configured via the web GUI of the endpoint. However, the 8180 speaker's microphone can also be used to monitor and adapt speaker volume according to background noise levels. This unique Algo feature is called Ambient Noise Compensation. Where many speakers are deployed in a room / building, volume can self-adjust to the background noise levels at each speaker location. Ambient Noise Compensation helps to ensure that announcements and alerts are heard but never too loud. Talkback is supported in the 8180. This feature can be enabled for a page call using the speaker's microphone. Multi-Application SIP Extensions Multiple SIP registrations are available in this IP speaker, including Page (50), Emergency Alert (10) and Ring (10) extensions. On Page, the speaker will auto-answer when called for making public address (PA) voice announcements. For Ring and Emergency Alert extensions the speaker will play a configurable WAV file from 1GB device memory when the extension is called (e.g., ring tones for telephone alerting, notification alerts for safety / security / emergency events and informational announcements).

Technical Specification Algo 8180 (G2) SIP Audio Alerter
Power Input

½ POWER INPUT PoE (IEEE 802.3af Class 0) 48V, 12.95W
½ MAX POWER 12.95W
½ IDLE POWER Nominal 2.5W

SIP

½ SIP EXTENSIONS 50 Page (Capable of hands-free talkback), 10 Emergency Alert, 10 Ring
½ SIP SIGNALLING/TRANSPORT PROTOCOLS UDP, TCP, TLS, RTP, SRTP

Multicast + Third-Party Compatibility

½ RTP Multicast (Send and Receive 50 Zones) Polycom Group Page Singlewire InformaCast (additional license required) Syn-Apps Revolution

Configuration & Provisioning

½ CONFIGURATION Web interface or provisioning server
½ WEB INTERFACE HTTP, HTTPS
½ PROVISIONING TFTP, FTP, HTTP, HTTPSDHCP Options 66, 150, 160 Reboot via SIP & check-sync
½ SUPERVISION Compatible with any third party SNMP monitoring software or the Algo 8300 Controller

Networking

Algo SIP Alerter 8180 (G2)

• NETWORKING IPv4, DHCP, VLANLINK LAYER LLDP, CDPQOS 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

• SPL 106 dBA at 1m (120 dBA with 1186 horn)
• MICROPHONE Omnidirectional – talkback and ambient noise monitoring
• AUDIO CODECS G.711 u-law, G.711 A-law, G.722 Wideband
• AUDIO MEMORY 1 GByte audio storage

Input/Output

• RELAY INPUT Normally open or normally closed dry contact supervision using Algo 1202 Call Button, 1203 Call Switch, 1204 Volume Control or EOL resistor termination
• RELAY OUTPUT Max 30 V 50 mA (normally open)

Environmental & Mechanical

• ENVIRONMENTAL 0 to + 40 °C (32 to 104 °F); 10-95% RH non-condensing. Dry indoor locations only.
• DIMENSIONS (PRODUCT) 7" x 4" x 2.6" (17.8cm x 10.2cm x 6.5cm)
• WEIGHT (PRODUCT) 1.0 lbs (0.5 kg)
• WEIGHT (SHIPPING) 1.6 lbs (0.7 kg)

Compliance

• RoHS, CE, FCC Class A, CISPR 22 Class A, CISPR 24, CSA/UL (USA & Canada), EN60950

Price: \$412.36