IP Dual-Sided Display Speaker for Visual and Audible Notification

With two-sided 15.6" LCD display screens, high-intelligibility speakers, and high visibility LED flashers, the 8410 can produce highly attention-grabbing visual and audible messages for emergency and day-to-day events along hallways, corridors, and large open spaces.

The 8420 IP Dual-Sided Display Speaker is a SIP-compliant and multicast-capable PoE endpoint designed to deliver two-sided audio and visual communication. Comprised of three core components – a 15.6" LCD display, high-intelligibility speakers, and high visibility LED flashers, the 8420 is dual-sided, each side mirroring the other to offer two-sided paging, notification, and alerting capabilities.

The primary element of the 8420 is the two opposite-facing LCD display screens. With unlimited visual possibilities, the screens can produce scrolling text, flashing announcements, full-color images, or key data points such as dates and times. Combined with LED backlighting and wide-angle viewing, the visual display can be seen from anywhere in a room or along a hallway. It can be customized to complement an audio announcement or to bring communication to an audio-less environment.

For audible alerting, the 8420 delivers wideband HD audio for clear voice communication and attention-grabbing audible alerting. An embedded microphone is included to enable ambient noise response and talkback capabilities.

The LED flashers provide additional awareness for important messages. When no announcement or notification is needed, a variety of messages can be displayed, including images, text, or an NTP clock.

FEATURES

— Two 15.6" wide-angle viewable full-color LCD display for off-axis visibility to display digital or analog NTP clock, scrolling text, and custom images
— Wideband HD audio (G.722 voice codec)
— Secure SIP using TLS and SRTP
— Ambient noise response to automatically adjust audio output
— Two-way talkback
— Multicast send and receive
— Four-color LED flashers
— PoE+ powered (IEEE 802.3at) and PoE++ powered (802.3bt)
— Smart relay input for accessories

APPLICATIONS

— Voice paging
— Emergency and safety notifications
— Visual notification
— Zoned paging and notifications
— Suitable environments include: hallway, corridor, reception area, workshop, cafeteria
— The 8420 is ideal for dual-sided applications (for single-sided application, see the 8420)
— Wall and ceiling-mount orientation available via included bracket

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POWER

POWER SOURCE	Recommended PoE++ (IEEE 802.3bt Type 4) Max 99.9 W Optional with reduced performance PoE++ type 3
MAX POWER (AT DEVICE)	71.3 W

SIP

SIP EXTENSIONS	• 50 Page (Capable of talkback when appropriate speaker & microphone connected) • 10 Emergency Alert • 10 Ring
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	• RESTful API • Poly Group Page™ • Singlewire InformaCast® (additional license required) • Intrado Revolution® • Microsoft Teams®

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 Management 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

SPEAKER	6 x Neodymium magnet with polypropylene cone
SPL	106 dBA at 1 m
MICROPHONE	Omnidirectional - talkback and ambient noise monitoring
AUDIO CONTROLS	Volume, AGC, Latency, LF Cut
ANTI-FEEDBACK DELAY	Cache to memory and release
AUDIO DELAY	Programmable 1-1000 ms synchronization delay (in multicast receiver mode)
MAX AUDIO POWER	16 W

VIDEO

LCD VIEWING AREA	• Two 15.6" screens • 13.5" x 7.6" (34.4 cm x 19.4 cm)
RESOLUTION	1920 x 1080 @ 60 fps
VIEWING ANGLE	88 deg (horizontal and vertical)
COLOR	16.7 M
CONTRAST	1000:1

MEMORY AND FORMAT

STORAGE FOR AUDIO FILES AND IMAGES	12 GB storage for audio (WAV or MP3) and images (JPG and PNG)

INPUT/OUTPUT

RELAY INPUT	Normally open or normally closed dry contact with supervision. Algo 1202 Call Button, 1203 Call Switch, 1204 Volume Control, EOL termination.

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)	19.21" x 9.33" x 2.93" (48.8 cm x 23.7 cm x 7.4 cm)
WEIGHT (PRODUCT)	9.85 lbs (4.5 kg)
WEIGHT (PRODUCT WITH BRACKET)	11.9 lbs (5.4 kg)
WEIGHT (SHIPPING)	14.3 lbs (6.5 kg)
MOUNTING	Mounting bracket

COMPLIANCE

RoHS, FCC Class A, CSA/UL (USA & Canada), EN60950

MOUNTING BRACKET, RIGHT VIEW

MOUNTING BRACKET, LEFT VIEW

ORDERING CODES:

8420	IP Dual-Sided Display Speaker
8420-IC	InformaCast IP Dual-Sided Display Speaker

COMPATIBLE ACCESSORIES:

1202	Call Button
1203	Call Switch
1204	Volume Control