

AXIS C1610-VE Network Sound Projector

Sleek, robust speaker for clear speech

This network sound projector features a clean and minimalistic design suited to both outdoor and indoor environments. Digital signal processing (DSP) ensures clear sound, and embedded audio management software lets users remotely coordinate security, safety, and operational messages alongside background music. Built-in memory supports prerecorded messages, and live speak lets personnel address events in real time. Built on open standards, this speaker supports integration with network video, access control, analytics, and VoIP (supporting SIP). This standalone unit connects directly to your standard network for a flexible, scalable, cost-effective audio solution. Furthermore, its IK10 vandal-resistant rating allows for placement almost anywhere.

- > Sleek, vandal-resistant design
- > All-in-one, outdoor-ready speaker system
- > Connects to standard network
- > Simple installation with PoE
- > Remote health testing





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Audio hardwar	<u>م</u>
Enclosure	One-way enclosure with 4-inch broadband dynamic cone speaker
Max sound pressure level	106 dB
Frequency response	200 Hz - 16 kHz
Coverage pattern	130° (at 2 kHz)
Audio input/output	Built-in microphone (can be disabled mechanically)
Built-in microphone specification	50 Hz - 15 kHz
Digital signal processing	Built-in and pre-configured
Amplifier description	Built-in 7 W Class D amplifier
Audio manage	ment
AXIS Audio Manager Edge	 Built in: Content management for music and live/pre-recorded announcements. Scheduling to decide when and where to play specific content. Content prioritization to ensure urgent messages interrupt the schedule. Zone management allowing you to divide up to 200 speakers into 20 zones. Health monitoring for remote discovery of system errors. User management to control who has access to what features. See separate datasheet for more details.
AXIS Audio Manager Pro	For larger and more advanced systems. Sold separately. See separate datasheet for specifications.
Audio software	
Audio streaming	$\ensuremath{One-way}\xspace$ the set of
Audio encoding	AAC LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Axis μ-law 16 kHz, WAV, MP3 in mono/stereo from 64 kbps to 320 kbps. Constant and variable bit rate. Sampling rate from 8 kHz up to 48 kHz.
System on chip	
Model	i.MX6 SX
Memory	512 MB RAM, 512 MB Flash
Network	
Security	Password protection, IP address filtering, HTTPS ^a encryption, IEEE 802.1X ^a network access control, Digest authentication, User access log
Network protocols	IPv4/v6, HTTP, HTTPS ^a , SIP, SSL/TLS ^a , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP TM , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, TCP, UDP, IGMPv1/v2/v3, ICMP, DHCP, ARP, SOCKS, SSH
System integrat	tion
Application Programming Interface	Open API for software integration, including VAPIX [®] , One-click cloud connection, AXIS Camera Application Platform (ACAP).
VolP	Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX. Tested with: SIP client such as Cisco, Bria and Grandstream and PBX suppliers such as Cisco and Asterisk. Supported SIP features: secondary SIP server, IPv6, SRTP, SIPS, SIP TLS, DTMF (RFC2976 and RFC2833), NAT (ICE, STUN, TURN) Supported codecs: PCMU, PCMA, opus, L16/16000, L16/8000, speex/8000, speex/16000, G.726-32
Intelligent audio	Auto Speaker Test
Event triggers	Virtual inputs, External input Call: DTMF, State changes, AXIS Camera Application Platform (ACAP)

Event actions	File upload: HTTP, network share and email Notification: email, HTTP and TCP Play audio clip Perform Auto Speaker Test Send SNMP trap Status LED
Built-in installation aids	Test tone verification and identification
Functional monitoring	Auto Speaker Test, Connection verification, Built-in system logging
Approvals	
EMC	EN 55032 Class B, EN 50121-4, IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class B, ICES-3(B)/NMB-3(B), VCCI Class B, RCM AS/NZS CISPR 32 Class B, KC KN32 Class B, KC KN35
Safety	IEC/EN/UL 62368-1, IEC/EN/UL 60950-22
Environment	IEC 62262 IK11, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC 60068-2-78, IEC/EN 60529 IP66, NEMA 250 Type 4X, MIL-STD-810G 509.5
Cybersecurity	ETSI EN 303 645
Cybersecurity	
Edge security	Software: Digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2) ^a , IEEE 802.1AR, HTTPS/HSTS ^a , TLS v1.2/v1.3 ^a , Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
Documentation	AXIS OS Hardening Guide Axis Vulnerability Management Policy Axis Security Development Model AXIS OS Software Bill of Material (SBOM) To download documents, go to axis.com/support/cybersecu- rity/resources
	To read more about Axis cybersecurity support, go to axis.com/cybersecurity
General	axis.com/cybersecurity
Casing	
Casing Power	axis.com/cybersecurity Impact-resistant aluminum, IP66-, IK10-, NEMA 4X-, and
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a. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).

