

## **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	
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
	<ul> <li>Zone management allowing you to divide up to 200 speakers into 20 zones.</li> <li>Health monitoring for remote discovery of system errors.</li> <li>User management to control who has access to what features. See separate datasheet for more details.</li> </ul>
AXIS Audio Manager Pro	For larger and more advanced systems. Sold separately. See separate datasheet for specifications.
Audio software	,
Audio streaming	$\ensuremath{One-way}\xspace$ with optional half-duplex echo cancellation. Mono.
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	(SoC)
Model	i.MX6 SX
Memory	512 MB RAM, 512 MB Flash
Network Security	Password protection, IP address filtering, HTTPS <sup>a</sup> encryption, IEEE 802.1X <sup>a</sup> network access control, Digest authentication, User access log
Network protocols	IPv4/v6, HTTP, HTTPS <sup>a</sup> , SIP, SSL/TLS <sup>a</sup> , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>™</sup> , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, TCP, UDP, IGMPv1/v2/v3, ICMP, DHCP, ARP, SOCKS, SSH
System integra	tion
Application Programming Interface	Open API for software integration, including VAPIX®, One-click cloud connection, AXIS Camera Application Platform (ACAP).
VoIP	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,

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
General	
Casing	Impact-resistant aluminum, IP66-, IK10-, NEMA 4X-, and MIL-STD-810G 509.5-rated.
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 (max. 12.95 W)
Connectors	RJ45 10BASE-T/100BASE-TX PoE I/0: 4-pin 2.5 mm terminal block for 2x supervised configurable I/Os
Reliability	Designed for 24/7 operation.
Operating conditions	-40°C to 55 °C (-40 °F to 131 °F) Humidity 10-100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (condensing)
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 IK10, 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
Dimensions	Ø203 X 105 mm (Ø8.0 x 4.1 in)
Weight	4.1 kg (9.0 lb)
Included accessories	Installation Guide, AVHS Authentication Key, AXIS Camera Station license key, AXIS Connector Guard A, Cable shoe
Optional accessories	AXIS T91B47 Pole Mount, AXIS T91F67 Pole Mount, Cable Gland M20x1.5, RJ45, Cable Gland A M20, AXIS Power over Ethernet Midspans, T94R01B Corner Bracket, T94P01B Corner Bracket, T94S01P Conduit Back Box For more accessories, see <i>axis.com</i>
Video management software	AXIS Camera Station, Video management software from Axis' Application Development Partners available on axis.com/techsup/software
Languages	English, German, French, Spanish, Italian
Warranty	5-year warranty, see axis.com/warranty

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).

