Audio Ceiling Tile Kit
AXIS C8210 Network Audio Amplifier integrated with 2x2 drop-in ceiling tile speaker

This timesaving, pre-assembled kit includes an AXIS C8210 Network Audio Amplifier integrated with a Quam SYSTEM 17/8 2x2 drop-in ceiling tile speaker. Utilizing AXIS C8210, the kit provides network audio via one PoE connection as well as flexibility for live or scheduled announcements, proactive security alerts, background music, advertisements and more. Axis audio management software offers zoning, scheduling and content management. Open standards support easy integration with network video, access control, analytics, and VoIP.

> Quick and easy drop-in installation

> AXIS C8210 brings benefits of network audio

> Open standards for easy integration

> UL 1480, UL 2043 and UL 62368-1 rated

Contact Axis support for any questions regarding installation or operation. 1-800-444-2947

https://www.axis.com/support

AXIS C8210 Network Audio Amplifier

Audio

Audio management	Software applications for managing and controlling your audio system regardless of its size and complexity: – Included in the product (runs inside the device) is AXIS Audio Manager Edge, offering zone management, content management, content scheduling and health monitoring. Up to 200 speakers and 20 zones are supported (see separate datasheet for more details). – For larger and more advanced systems we recommend AXIS Audio Manager Pro (see separate datasheet).
Maximum output power	6 W with PoE Class 3, 15 W with PoE Class 4
Supported speaker impedance	4–16 Ω
Frequency response	20 Hz - 20 kHz
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.
Audio streaming	One-way/two-way[a], mono

Network

Security	Password protection, IP address filtering, HTTPS[b] encryption, IEEE 802.1X[b] network access control, Digest authentication, User access log, Centralized Certificate Management
Supported protocols	IPv4/v6[c], HTTP, HTTPS[b], SSL/TLS[b], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMP v1/v2c/v3 (MIB–II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, NTCIP, SIP (Cisco, Avaya, Asterisk)

System integration

Application Programming Interface	Open API for software integration, including VAPIX®, One-click cloud connection, AXIS Camera Application Platform (ACAP) Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX. Tested with various SIP clients such as Cisco, Bria and Grandstream. Tested with various PBX suppliers such as Cisco and Asterisk.
Audio synchronization	Built-in audio synchronization for up to 30 speakers with unicast and hundreds of speakers with multicast. No additional speaker management software or hardware required.
Intelligent audio	Speaker impedance detection and over current protection
Event triggers	Call, virtual inputs, external input, AXIS Camera Application Platform (ACAP)
Event actions	Play audio clip, send SNMP trap, status LED File upload via HTTP, network share and email Notification via email, HTTP, HTTPS and TCP External output activation
Built–in installation aids	Test verification and identification

General

Casing	IP20-rated Metal casing Color: Black NCS S 9000–N
Environment	PVC free
Memory	512 MB RAM, 512 MB Flash
Power	Power over Ethernet (PoE) IEEE 802.3af Type 1 Class 3 (max 12.95 W), IEEE 802.3at Type 2 Class 4 (max 25 W)
Connectors	RJ45 10BASE-T/100BASE-TX PoE I/O: 4-pin 2.5 mm terminal block for two configurable inputs/outputs Audio: 3 pole 3.5 mm line/mic-in (2.2 V $_{rms}$), 2–pin 5.08 mm speaker-out
Storage	Support for microSD/microSDHC/microSDXC card Max. size 128 GB For SD card recommendations see *www.axis.com*
Reliability	Designed for 24/7 operation.
Operating conditions	–20 °C to 50 °C (4 °F to 122 °F) Humidity 10–85% RH (non-condensing)
Storage conditions	–40 °C to 65 °C (–40 °F to 149 °F)
Approvals	EMC EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, EN 55035, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A Safety IEC/EN/UL 62368-1 Environment IEC/EN 60529 IP20, UL2043 Plenum rated, NEMA 250 Type 1, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27
Dimensions	140 x 75 x 29 mm (5 1/2 x 2 15/16 x 1 1/8 in)
Weight	257 g (0.57 lb)
Included accessories	Installation Guide, AVHS authentication key, AXIS Camera Station license key, I/O connector, speaker connector, velcro, cable ties
Optional accessories	AXIS Device Microphone A For more accessories, see *www.axis.com*
Management software	AXIS Audio Manager C7050, AXIS Camera Station, video management software from Axis' Application Development Partners available on *www.axis.com/support/downloads*
Languages	English
Warranty	5-year warranty, see *axis.com/warranty*

a. *This product supports two-way audio, audio in and audio out. The product does not support two-way communication for conversations.*
b. *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).*
c. *Audio synchronization with IPv4 only.*

Environmental responsibility:

axis.com/environmental-responsibility

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Quam 2x2 Tile Speaker Specifications

Quam SYSTEM 17/8 is a complete, UL Listed, shallow depth, lightweight, 2' x 2' ceiling tile replacement loudspeaker system consisting of an 8" O.D., foam edge loudspeaker with a 10 oz. magnet and an 8 Ohm impedance. The molded fiber enclosure is 1,283 CID. The SYSTEM 17/8 has a powder coated steel baffle with standard perforation and four (4) seismic tie-off points. The cable clamp is included. No assembly required.

Application		
	Intended Use:	Indoor environment
	Program Material:	Signal tones, voice, and music
	Installation:	Mounted parallel to floor plane in a 24" wide suspended ceiling tile grid
	City of Chicago Approved:	Material and construction permits use where ceiling plenum is part of the air handling system

Audio performance		
	Average Sensitivity:	95dB SPL, 1W/1M
	Loudspeaker Power Rating:	20W RMS, EIA 426A Standard
	Maximum Power Rating:	20W @ 8 Ohms
	Calculated Output:	102dB SPL, 5W/1M
	Magnet Type & Weight:	BeFe Ceramic, 10 oz. Nominal
	Frequency Response:	60Hz - 17kHz, EIA 426A Standard
	Nominal Coverage Angle:	100° Included Angle, -6dB/2kHz, Half Space
	Audio Connection:	3 ½", Color-coded, Pre-tinned Leads

Component		
	Dimension:	H: 3 ½" (88.9 mm), W: 23 $^{13}/_{16}$" (604.8 mm), D: 23 $^{13}/_{16}$" (604.8 mm)
	Weight:	6.36 lbs.
	Loudspeaker Model:	8C10FEPAX
	Loudspeaker Specs:	8" O.D. loudspeaker, 5 oz. magnet
	Integral Enclosure:	1,283 CID molded fiber
	Grille:	Standard perforated steel with four (4) seismic tie-off points
	Finish:	White powder coat finish

Certification		
	UL Listed 1480	When installed with supplied installation instructions and requirements of NEC /AHJ. (UEAY, UEAY7- Canada)
	UL Listed 2043	Suitable for use in air-handling spaces

Standard Perforation Pattern
Shown as 1" Square Sample