

# Audio Ceiling Tile Kit – Camera Ready

**AXIS C8210 Network Audio Amplifier integrated with camera ready 2x2 ceiling tile speaker**

This timesaving, pre-assembled kit includes an AXIS C8210 Network Audio Amplifier integrated with a Quam SYSTEM 17/8DM 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. This camera-ready version provides a 9-inch mounting for a fixed-dome or panoramic camera, or another device that fits a 1-gang and 4-square mounting hole pattern.

- > **Mounting for 1-gang and 4-square box devices**
- > **Easily add a fixed dome or panoramic network camera**
- > **AXIS C8210 brings benefits of network audio**
- > **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>**

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# AXIS C8210 Network Audio Amplifier

Audio		General	
<b>Audio management</b>	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).	<b>Casing</b>	IP20-rated Metal casing Color: Black NCS S 9000–N
<b>Maximum output power</b>	6 W with PoE Class 3, 15 W with PoE Class 4	<b>Environment</b>	PVC free
<b>Supported speaker impedance</b>	4–16 Ω	<b>Memory</b>	512 MB RAM, 512 MB Flash
<b>Frequency response</b>	20 Hz – 20 kHz	<b>Power</b>	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)
<b>Audio encoding</b>	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.	<b>Connectors</b>	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 <sub>rms</sub> ), 2-pin 5.08 mm speaker-out
<b>Audio streaming</b>	One-way/two-way <sup>a</sup> , mono	<b>Storage</b>	Support for microSD/microSDHC/microSDXC card Max. size 128 GB For SD card recommendations see <a href="http://www.axis.com">www.axis.com</a>
Network		<b>Reliability</b>	Designed for 24/7 operation.
<b>Security</b>	Password protection, IP address filtering, HTTPS <sup>b</sup> encryption, IEEE 802.1X <sup>b</sup> network access control, Digest authentication, User access log, Centralized Certificate Management	<b>Operating conditions</b>	–20 °C to 50 °C (4 °F to 122 °F) Humidity 10–85% RH (non-condensing)
<b>Supported protocols</b>	IPv4/v6 <sup>c</sup> , HTTP, HTTPS <sup>b</sup> , SSL/TLS <sup>b</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>TM</sup> , 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)	<b>Storage conditions</b>	–40 °C to 65 °C (–40 °F to 149 °F)
System integration		<b>Approvals</b>	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 <b>Safety</b> IEC/EN/UL 62368-1 <b>Environment</b> 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
<b>Application Programming Interface</b>	Open API for software integration, including VAPIX <sup>®</sup> , 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.	<b>Dimensions</b>	140 x 75 x 29 mm (5 1/2 x 2 15/16 x 1 1/8 in)
<b>Audio synchronization</b>	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.	<b>Weight</b>	257 g (0.57 lb)
<b>Intelligent audio</b>	Speaker impedance detection and over current protection	<b>Included accessories</b>	Installation Guide, AVHS authentication key, AXIS Camera Station license key, I/O connector, speaker connector, velcro, cable ties
<b>Event triggers</b>	Call, virtual inputs, external input, AXIS Camera Application Platform (ACAP)	<b>Optional accessories</b>	AXIS Device Microphone A For more accessories, see <a href="http://www.axis.com">www.axis.com</a>
<b>Event actions</b>	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	<b>Management software</b>	AXIS Audio Manager C7050, AXIS Camera Station, video management software from Axis' Application Development Partners available on <a href="http://www.axis.com/support/downloads">www.axis.com/support/downloads</a>
<b>Built-in installation aids</b>	Test verification and identification	<b>Languages</b>	English
		<b>Warranty</b>	5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>

- 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](http://www.openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).  
c. Audio synchronization with IPv4 only.

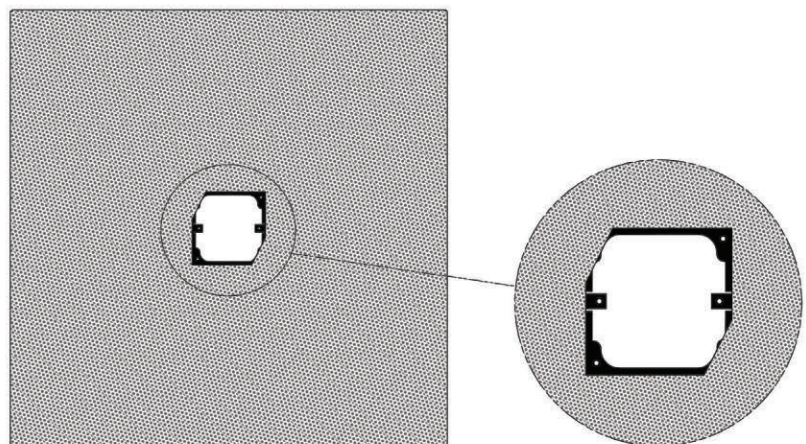
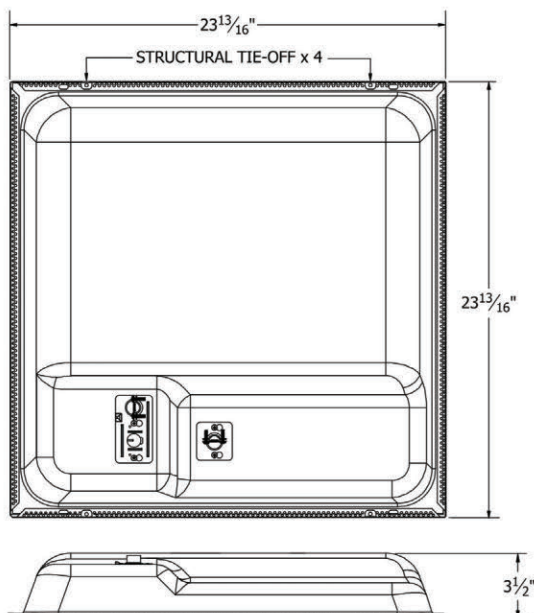
Environmental responsibility:

[axis.com/environmental-responsibility](http://axis.com/environmental-responsibility)

# Quam 2x2 Tile Speaker Specifications

Quam SYSTEM 17/8DM 24" x 24" tile replacement loudspeaker system that can accommodate either a single-gang or 4 square device mount such as a 3rd party strobe, wifi access point, status indicator light or camera. Easy cabling pass through to front device mount location. Components include an 8" O.D. foam edge loudspeaker with a 10 oz. magnet in an 8 Ohm impedance. Integral enclosure is 1,283 CID molded fiber. The grille is perforated steel with four (4) seismic tie-off points in a white powder coat finish.

<b>Application</b>	Intended Use:	Indoor environment with extra device mount
	Program Material:	Signal tones, voice, and background music
	Installation:	Fits in a 2'x 2' or 2'x 4' wide ceiling tile grid
	Maximum Device Load Mount:	Not to exceed 3 lbs.
	City of Chicago Approved:	Material and construction permits use where ceiling plenum is part of the air handling system
<b>Audio performance</b>	Average Sensitivity:	95dB SPL, 1W/1M
	Loudspeaker Power Rating:	20W RMS, EIA 426A Standard
	Maximum Power Rating:	20W @ 8 Ohms
	Calculated Output:	102dB SPL, 4W/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
<b>Component</b>	Audio Connection:	3 1/2", Color-coded, Pre-tinned Leads
	Dimension:	H: 3 1/2" (88.9 mm), W: 23 13/16" (604.8 mm), D: 23 13/16" (604.8 mm)
	Weight:	6.35 lbs.
	Loudspeaker Model:	8C10FEPAX
	Loudspeaker Specs:	8" O.D. foam edge loudspeaker, 10 oz. magnet, 8 Ohm impedance
	Integral Enclosure:	1,283 CID molded fiber
	Grille:	Standard perforated steel with four (4) seismic tie-off points
<b>Certification</b>	Finish:	White powder coat finish
	Device Mount:	Built-in 4 square and single
	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



1-gang and 4 Sq mounting hole pattern