

# AXIS D3110 Mk II Connectivity Hub

## Secure sensor and audio integration

AXIS D3110 Mk II gives sensor and audio capabilities to network video systems that don't have them or need additional ones – a perfect fit in an Axis end-to-end solution. It connects to a broad range of non-visual sensors to trigger alarms and events in the system. Connected to a microphone, a speaker, or both, AXIS D3110 Mk II increases scene awareness through high-quality audio. It supports ACAP (AXIS Camera Application Platform) and seamless integration through VAPIX®, MQTT, or SIP. Furthermore, Axis Edge Vault, a hardware-based cybersecurity platform, safeguards the device and protects sensitive information from unauthorized access.

- > **Eight supervised configurable I/Os**
- > **Two audio-in ports, one audio-out port**
- > **VAPIX®, MQTT, SIP integration**
- > **AXIS Audio Analytics preinstalled**
- > **Built-in cybersecurity with Axis Edge Vault**



# AXIS D3110 Mk II Connectivity Hub

## System on chip (SoC)

### Model

NXP i.MX 8M Nano

### Memory

1024 MB RAM, 1024 MB Flash

## Audio

### Audio features

Automatic gain control

10-band graphic equalizer for audio input

Voice enhancer

### Audio streaming

Two-way, full duplex

Simplex – speaker only

Simplex – microphone only

### Audio input

Input 1: External microphone input or line input (balanced or unbalanced), digital audio input with optional 12 V ring power

Input 2: External microphone input or line input (balanced or unbalanced)

Microphone power 5 V on tip, phantom power 12 V on tip/ring, ring power 12 V for digital input on ring

### Audio output

Line output

### Audio encoding

AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726

ADPCM 8 kHz, Axis  $\mu$ -law 16 kHz, Opus 8/16/48 kHz

## Audio management

### AXIS Audio Manager Edge

Built in:

- Zone management allowing you to divide up to 200 speakers into 20 zones.
- Content management for music and live/pre-recorded announcements.
- Scheduling to decide when and where to play content.
- Content prioritization to ensure urgent messages interrupt the schedule.
- Health monitoring for remote discovery of system errors.
- User management to control who has access to what features.

For more details, see the datasheet on [axis.com/products/axis-audio-manager-edge/support](https://axis.com/products/axis-audio-manager-edge/support)

### AXIS Audio Manager Center

AXIS Audio Manager Center is a cloud service for remote access and management of multi-site systems.

For specifications, see the datasheet on [axis.com/products/axis-audio-manager-center/support](https://axis.com/products/axis-audio-manager-center/support)

## I/O interface

### Configurable I/Os

2 x 6 pin connectors, each with ground, 12 V at max 50 mA and 4 supervised configurable I/Os

### Relays

1 x SPDT relay, terminal block, max 1 A, max 30 V DC

### RS485

RS485 or RS422 half/full duplex, max 460.8 kbps

## Network

### Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS<sup>1</sup>, HTTP/2, TLS<sup>1</sup>, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)

1. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](https://openssl.org)), and cryptographic software written by Eric Young ([eyay@cryptsoft.com](mailto:eyay@cryptsoft.com)).

## System integration

### Application Programming Interface

Open API for software integration, including VAPIX® and AXIS Camera Application Platform (ACAP); specifications at [axis.com/developer-community](https://axis.com/developer-community).

One-click cloud connection

Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX.

### Event conditions

Audio: audio clip playing

Audio analytics: audio level above threshold, glass break detected, scream detected, shout detected

Call: state, state change

Device status: above/below/within operating temperature, IP address blocked/removed, live stream active, network lost, new IP address, ring power overcurrent protection, system ready

Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal okay

Edge storage: recording ongoing, storage disruption, storage health issues detected

I/O: digital input is active, digital output is active, manual trigger, virtual input is active

MQTT: MQTT client connected, stateless

Scheduled and recurring: schedule

### Event actions

Audio clips: play audio clip, play audio clip while the rule is active, stop playing audio clip

Calls: answer call, end SIP call, make SIP call

I/O: toggle I/O once, toggle I/O while the rule is active

LEDs: flash status LED, flash status LED while the rule is active

MQTT: send MQTT publish message

Notification: HTTP, HTTPS, TCP and email

Recordings: record audio, record audio while the rule is active

Security: erase configuration

SNMP trap messages: send, send while the rule is active

## Analytics

### AXIS Audio Analytics

Features: adaptive audio detection, audio classification

Audio classes: scream, shout, glass break, speech

## Approvals

### Product markings

CSA, UL/cUL, CE, KC, VCCI, RCM

### Supply chain

TAA compliant

### EMC

EN 55035, EN 55032 Class A, EN 50121-4, EN 50130-4, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, IEC 62236-4

Australia/New Zealand: RCM AS/NZS CISPR 32 Class A

Canada: ICES(A)/NMB(A)

Japan: VCCI Class A

Korea: KS C 9835, KS C 9832 Class A

USA: FCC Part 15 Subpart B Class A

### Safety

CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1

### Environment

UL 2043 (plenum rating), IEC 60068-2-1,

IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14,

IEC 60068-2-27, IEC 60068-2-64, IEC/EN 60529 IP30

### Network

NIST SP500-267

### Cybersecurity

ETSI EN 303 645, BSI IT Security Label, FIPS 140

## Cybersecurity

### Edge security

**Software:** Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, Axis Cryptographic Module (FIPS 140-2 level 1)

**Hardware:** Axis Edge Vault cybersecurity platform Secure element (CC EAL 6+, FIPS 140-3 Level 3), system-on-chip security (TEE), Axis device ID, secure keystore, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)

## Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)<sup>2</sup>, IEEE 802.1AR, HTTPS/HSTS<sup>2</sup>, TLS v1.2/v1.3<sup>2</sup>, 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/cybersecurity/resources](https://axis.com/support/cybersecurity/resources)

To read more about Axis cybersecurity support, go to [axis.com/cybersecurity](https://axis.com/cybersecurity)

## General

### Casing

IP30-rated aluminum casing

Color: black NCS S 9000-N

### Mounting

AXIS T91A03 DIN Clip A

Mounting bracket

### Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3, typical 3 W, max 9.53 W

or

10–28 V DC, typical 3 W, max 9.0 W

### Connectors

Audio: 2 x 3.5 mm input, 1 x 3.5 mm output

Data transfer: 1x USB 2.0 Type A, max load 500 mA, supported USB class: HID, Audio, Audio/Video Devices

I/O: 2 x 6 pin terminal block for 4 supervised configurable I/Os

I/O: 1 x relay, terminal block

Network: 1 x Shielded RJ45 10BASE-T/100BASE-TX PoE

Power: DC input, terminal block

Serial communication: RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block

### Storage

Support for microSD/microSDHC/microSDXC card

Support for SD card encryption (AES-XTS-Plain64 256bit)

Recording to network-attached storage (NAS)

For SD card and NAS recommendations see [axis.com](https://axis.com)

## Operating conditions

Temperature: -40 °C to 70 °C (-40 °F to 158 °F)

Start-up temperature: -20 °C (-4 °F)

Humidity: 10–85% RH (non-condensing)

## Storage conditions

Temperature: -40 °C to 70 °C (-40 °F to 158 °F)

Humidity: 5–95% RH (non-condensing)

## Dimensions

For the overall product dimensions, see the dimension drawing in this datasheet.

## Weight

445 g (0.98 lb)

## Box content

Installation guide, connectivity hub, connector kit

## Optional accessories

AXIS T91A03 DIN Clip A, AXIS TD3901 Strain Relief

AXIS T8351 Mk II Microphone 3.5 mm, AXIS C8310 Volume Controller

AXIS Surveillance Cards

For more accessories, go to [axis.com/products/axis-d3110-mkii#compatible-products](https://axis.com/products/axis-d3110-mkii#compatible-products)

## Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

## Warranty

5-year warranty, see [axis.com/warranty](https://axis.com/warranty)

## Part numbers

Available at [axis.com/products/axis-d3110-mkii#part-numbers](https://axis.com/products/axis-d3110-mkii#part-numbers)

## Sustainability

### Substance control

PVC free, BFR/CFR free in accordance with JEDEC/ECA Standard JS709

RoHS in accordance with EU RoHS Directive 2011/65/EU and 2015/863, and standard EN IEC 63000:2018

REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see [echa.europa.eu](https://echa.europa.eu)

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](https://openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

## **Materials**

Screened for conflict minerals in accordance with OECD guidelines

To read more about sustainability at Axis, go to [axis.com/about-axis/sustainability](https://axis.com/about-axis/sustainability)

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## **Environmental responsibility**

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

Axis Communications is a signatory of the UN Global Compact, read more at [unglobalcompact.org](https://unglobalcompact.org)

