

AXIS M7104 Video Encoder

Cost-effective, 4-channel video encoder with Zipstream

AXIS M7104 is a cost-effective, 4-channel video encoder that adds the benefits of IP surveillance to an analog camera system. It supports standard-resolution analog cameras as well as PTZ control over RS-485/422. The encoder features a memory card slot for edge storage and support for intelligent analytics such as motion detection and active tampering alarm. Enhanced security features such as signed firmware and secure boot ensure the integrity and authenticity of the encoder's firmware. Plus, Zipstream with support for H.264/H.265 video compression significantly reduces bandwidth and storage requirements.

- > Full frame rate in all resolutions
- > Zipstream with support for H.264/H.265
- > Signed firmware and secure boot
- > Extended capacity for analytics
- > PoE and PTZ support



AXIS M7104 Video Encoder

System on chip (SoC)

Model

ARTPEC-7

Memory

1024 MB RAM, 512 MB Flash
Battery backed-up real-time clock

Video

Video compression

H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles
H.265 (MPEG-H Part 2/HEVC) Main Profile
Motion JPEG

Resolution

176x144/176x120 (PAL/NTSC) to 720x576/720x480 (PAL/NTSC)

Frame rate

25/30 fps in all resolutions
Up to 30 fps in quad view in full resolution

Video streaming

Multiple, individually configurable streams in H.264, H.265 and Motion JPEG
Axis Zipstream technology in H.264 and H.265
Controllable frame rate and bandwidth
VBR/MBR H.264/H.265
Quad view

Image settings

Compression, color, brightness, contrast, rotation: 0°, 90°, 180°, 270°, aspect ratio correction, mirroring of images, text and image overlay, privacy mask, enhanced deinterlace filter, video termination, anti-aliasing, sharpness, noise reduction, local enhancement

Pan/Tilt/Zoom

Wide range of analog PTZ cameras supported, drivers included in the firmware
Up to 100 preset positions/camera, Guard tour, PTZ control queue
Supports Windows compatible joysticks

Network

IP address

One IP address for four channels

Security

IP address filtering, HTTPS¹ encryption, IEEE 802.1X¹ network access control, user access log, centralized certificate management

Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS¹, TLS¹, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, PTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SSH

System integration

Application Programming Interface

Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at axis.com
AXIS Video Hosting System (AVHS) with One-Click Camera Connection
One-click cloud connection
ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specification at onvif.org

Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at axis.com/vms.

Event triggers

Analytics, video loss, edge storage events
MQTT subscribe

Event actions

File upload: FTP, SFTP, HTTP, HTTPS network share and email
Notification: email, HTTP, HTTPS and TCP
External output activation
MQTT publish
Pre- and post-alarm video buffering
PTZ preset
Status LED

1. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (ey@cryptosoft.com).

Data streaming

Event data

Analytics

Applications

Included

AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard

AXIS Video Motion Detection, active tampering alarm

Supported

Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap

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, AES-XTS-Plain64 256bit SD card encryption

Hardware: Secure boot

Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)², IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS², TLS v1.2/v1.3², 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

To read more about Axis cybersecurity support, go to axis.com/cybersecurity

General

Casing

Stand alone, metal casing, wall mount

Sustainability

PVC free

Power

8-28 V DC, max 4.7 W Power over Ethernet (PoE)

IEEE 802.3af/802.3at Type 1 Class 3

Connectors

Four analog composite video BNC input

RJ45 10BASE-T/100BASE-T/1000 BASE-T PoE

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)

Support for recording to network-attached storage (NAS)

For SD card and NAS recommendations see axis.com

Operating conditions

0 °C to 50 °C (32 °F to 122 °F)

Humidity 10-85% RH (non-condensing)

Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)

Humidity 5-95% RH (non condensing)

Approvals

EMC

EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, EN 55024, 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, KC KN32 Class A, KC KN35

Safety

IEC/EN/UL 62368-1

Environment

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78

Network

NIST SP500-267

Dimensions

187 x 37 mm (7.4 x 1.5 in)

Weight

650 g (1.4 lb)

Included accessories

Installation guide, Windows® decoder 1-user license, DC input plug, 2 pcs 2-pin RS485/RS422 plugs

Optional accessories

For more accessories, see axis.com

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).

Languages

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

Warranty

Axis 3-year warranty, see axis.com/warranty