AXIS P7304 Video Encoder

Full-featured, 4-channel video encoder with HD analog support

AXIS P7304 is a full-featured, 4-channel video encoder that adds the benefits of IP surveillance to any analog camera system. It supports standard and HD analog cameras up to 4K resolution, and analog PTZ cameras. 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. The encoder features two-way audio, I/O ports, and a memory card slot for edge storage. It also comes with intelligent analytics such as motion detection, audio detection and tampering alarm.

> **Support for HD analog cameras up to 4K**

> **PTZ control**

> **2-way audio and configurable I/O**

> **Zipstream with support for H.264/H.265**

> **Signed firmware and secure boot**

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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). Also high definition TVI, high definition CVI and high definition analog HD (1280x720 and 1920x1080) One channel 4K (3840x2160)
Frame rate	25/30 fps in all resolutions up to 1080p Up to 30 fps in quad view in full resolution 1080p One channel 4K up to 15 fps
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 Compatible with Coaxitron® by Pelco

Audio

Audio encoding	24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate
Audio input/output	Two analog or digital external microphone input or line input, line output.

Network

IP address	One IP address for four channels
Security	IP address filtering, HTTPS[a] encryption, IEEE 802.1X[a] network access control, user access log, centralized certificate management
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS[a], TLS[a], 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)

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*
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

Data streaming	Event data

Analytics

Applications	Included AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, AXIS Video Motion Detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

Cybersecurity

Edge security	**Software:** Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption **Hardware:** Secure boot
Network security	IEEE 802.1X (EAP-TLS)[a], IEEE 802.1AR, HTTPS/HSTS[a], TLS v1.2/v1.3[a], Network Time Security (NTS), X.509 Certificate PKI, IP address filtering
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 8.2 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 6-pin 2.5 mm I/O terminal block with four configurable inputs and outputs 2 pcs 3.5 mm mic/line in, 1 pcs 3.5 mm line out 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, 6-pin I/O plug, 2 pcs 2-pin RS485/RS422 plugs
Optional accessories	For more accessories, see *axis.com*
Video management software	AXIS Companion, AXIS Camera Station, Video management software from Axis Application Development Partners available at *axis.com/vms*
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

Warranty	5-year warranty, see *axis.com/warranty*

a. *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).*

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