AXIS M7116 Video Encoder

Cost-effective, 16-channel video encoder with Zipstream

AXIS M7116 is a cost-effective, 16 channel video encoder that adds the benefits of IP surveillance to analog camera systems. It supports standard resolution analog cameras as well as PTZ control over RS-485. This rack-mounted encoder features memory card slots for edge storage as well as support for intelligent analytics such as motion detection and active tampering alarm. Including Zipstream with H.264/H.265, it significantly reduces bandwidth and storage requirements without compromising image quality. Furthermore, it offers enhanced security features such as signed firmware and secure boot.

> **30 fps on all 16 channels**

> **PTZ control**

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

> **Signed firmware and secure boot**

> **Support for intelligent analytics**

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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)
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/ABR/MBR H.264/H.265 Quad view
Image settings	Rotation: 0°, 90°, 180°, 270°, de-interlace filter, compression, color, brightness, contrast, aspect ratio correction, mirroring of images, text and image overlay, polygon privacy mask, video termination, sharpness, noise reduction

Network

IP address	Four IP address, one per four channels
Security	Password protection, IP address filtering, HTTPS[a] encryption, IEEE 802.1x (EAP-TLS)[a], network access control, digest authentication, user access log, multi-level user, brute force delay protection, signed firmware, secure boot, Axis Edge Vault with Axis device ID
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, RTSP, RTP, SRTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Syslog, 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* One-click cloud connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at *onvif.org*
Event conditions	Device status: IP address removed, network lost, new IP address, storage failure, system ready Edge storage: recording ongoing, storage disruption I/O: manual trigger, virtual input MQTT subscribe PTZ: PTZ malfunctioning, PTZ movement, PTZ preset position reached, PTZ ready Scheduled and recurring: scheduled event Video: average bitrate degradation, live stream open, tampering Video encoder: video connected
Event actions	Guard tours, upload of images or video clips, notification, overlay text, preset positions, recordings, SNMP trap messages, status LED, video clips MQTT publish
Data streaming	Event data

Analytics

Applications	Included AXIS Video Motion Detection, active tampering alarm

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

General

Casing	Metal casing 1U stand alone, rackmount or wallmount Color: white NCS S 1002-B
Sustainability	PVC free
Power	max 26 W
Connectors	16 pcs analog video BNC inputs 1 pc 1000 BASE-TX Ethernet (RJ45) 4 pcs terminal block for RS485/RS422 serial communication (full duplex) 1 pc DC input terminal block
Storage	Support for microSD/microSDHC/microSDXC card and encryption 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 55035, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(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	44 x 145 x 440 mm (1.7 x 5.7 x 17.3 in)
Weight	2050 g (4.5 lb)
Included accessories	Installation guide, Windows® decoder 1-user license, DC input plug, 8 pcs 2-pin RS485/RS422 plugs, mains power supply, mounting and connector kit
Optional accessories	For 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, Polish, Traditional Chinese
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).*

Environmental responsibility:

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