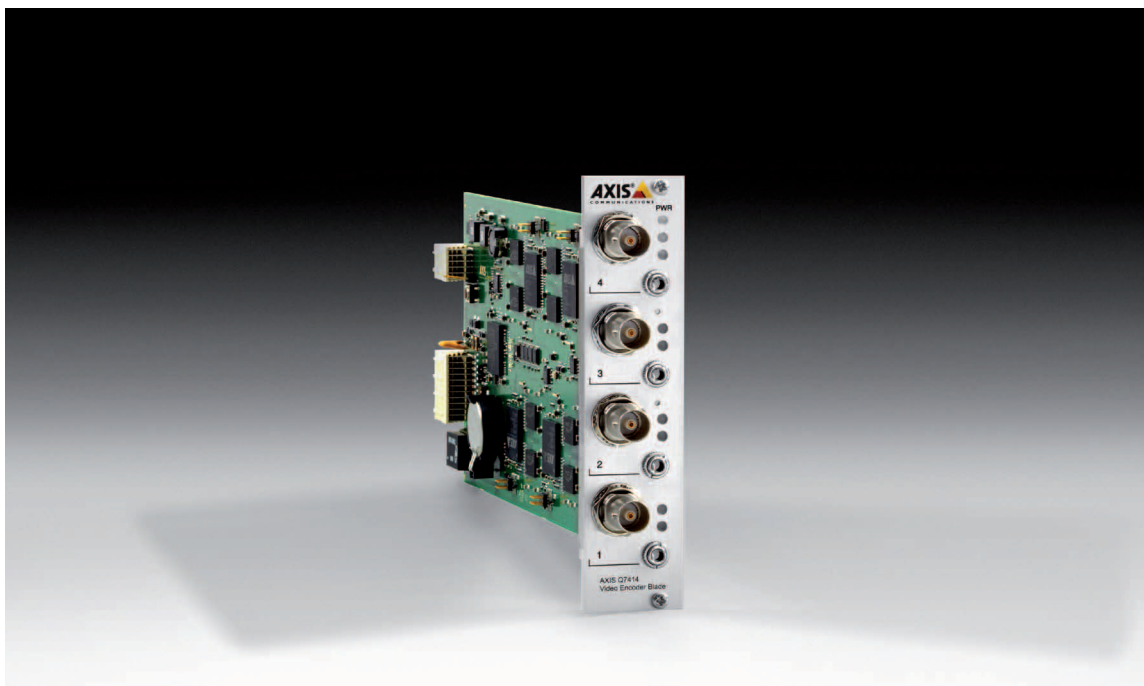# AXIS Q7414 Video Encoder Blade

High-density video surveillance solution with H.264 and full audio support.

> **Superb video quality**

> **Multiple H.264 streams**

> **Four audio channels**

> **Support for balanced microphones**

> **Intelligent video capabilities**

> **High-density solution**

AXIS Q7414 Video Encoder Blade is a four-channel blade for video encoder rack solutions, enabling large numbers of analog cameras and audio channels to be integrated into an IP-based, high-density video surveillance system. The high-performance video encoder blade provides superb video quality, outstanding compression capabilities and two-way audio support.

When AXIS Q7414 blades are used with AXIS Q7900 Rack, up to 56 analog cameras and audio channels can be supported in one 4U, 19-inch rack.

AXIS Q7414 offers the highly efficient H.264 video compression, which drastically reduces bandwidth and storage requirements without compromising image quality. Motion JPEG is also supported for increased flexibility.

AXIS Q7414 can deliver multiple, individually configurable video streams from each channel at full frame rate in all resolutions up to D1 (720x480 in NTSC, 720x576 in PAL). The four audio channels deliver high-quality AAC streams, providing a compact and cost-effective solution for large

installations that require two-way audio. In addition, the built-in phantom power source with adjustable input gain simplifies the installation of balanced microphones.

The video encoder also enables users to adjust image settings such as contrast, brightness and saturation to improve images before encoding takes place.
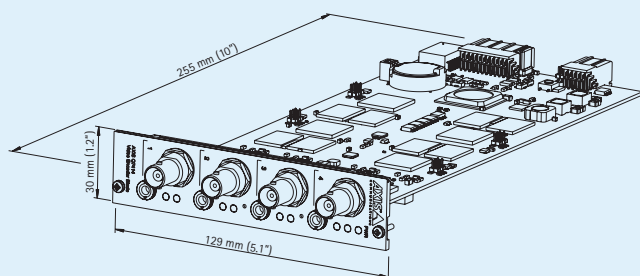
AXIS Q7414 offers intelligent capabilities such as enhanced video motion detection, active tampering alarm and audio detection. The encoder's external inputs and outputs can be connected to devices such as sensors and relays, enabling the system to react to alarms and activate lights or open/close doors.

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Technical specifications – AXIS Q7414 Video Encoder Blade

Video encoder	
Video compression	H.264 (MPEG-4 Part 10/AVC) Motion JPEG
Resolutions	NTSC: 720x480 (D1) to 176x120 (QCIF) PAL: 720x576 (D1) to 176x144 (QCIF)
Frame rate H.264	30/25 (NTSC/PAL) fps in all resolutions
Frame rate Motion JPEG	30/25 (NTSC/PAL) fps in all resolutions
Video streaming	Multi-stream H.264 and Motion JPEG: 3 simultaneous, individually configured streams in max. resolution at 30/25 fps; more streams if identical or limited in frame rate/resolution Controllable frame rate and bandwidth VBR/CBR H.264
Image settings	Compression, color, brightness, contrast Rotation: 90°, 180°, 270° Aspect ratio correction Mirroring of images Text and image overlay Privacy mask Enhanced deinterlace filter Video termination Anti-aliasing
Pan/Tilt/Zoom	Wide range of analog PTZ cameras supported (drivers available for download at www.axis.com) 100 presets/camera, guard tour, PTZ control queue Supports Windows compatible joysticks

Audio	
Audio streaming	Two-way
Audio compression	In: AAC-LC 8 or 16 kHz 8–64 kbit/s, G.711 PCM 8 kHz 64 kbit/s, G.726 ADPCM 8 kHz 32 or 24 kbit/s Out: G.711 PCM 8 kHz 64 kbit/s, μ-law PCM 16 kHz 128 kbit/s, G.726 ADPCM 8 kHz 32 kbit/s or 24 kbit/s
Input/output	External microphone input or line input (balanced or unbalanced) and line output (unbalanced), Phantom Power

Network	
Security	Password protection, IP address filtering, HTTPS* encryption, IEEE 802.1X network access control, digest authentication, user access log
Supported protocols	IPv4/v6, HTTP, HTTPS*, QoS layer 3 DiffServ, FTP, SMTP, Bonjour, UPnP, SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS

System integration	
Application Programming Interface	Open API for software integration, including the ONVIF specification available at www.onvif.org, as well as VAPIX® and AXIS Camera Application Platform from Axis Communications, specifications available at www.axis.com Support for AXIS Video Hosting System (AVHS) with One-Click Camera connection
Intelligent video	Video motion detection, audio detection, active tampering alarm Support for AXIS Camera Application Platform enabling installation of additional applications
Alarm triggers	Intelligent video, external inputs, video loss, audio detection
Alarm events	File upload via FTP, HTTP and email Notification via email, HTTP and TCP PTZ preset External output activation Play audio clip Pre- and post-alarm video buffering

General	
Processors and memory	4x ARTPEC-3, 4x 256 MB RAM, 4x 128 MB Flash
Power	12 V DC, max. 13.0 W
Connectors	4 analog composite video BNC inputs 4 3.5 mm jacks for mono microphone or line input (max. 6 Vpp) and mono line output (typical 1.8 Vpp at 1 kohm) 10BASE-T/100BASE-TX/1000BASE-T Ethernet 8 configurable external inputs/outputs Up to 4 RS-485/RS-422 half duplex, depending on the rack
Operating conditions	0 °C to 45 °C (32 °F to 113 °F) Humidity 20-80% RH (non-condensing)
Approvals	EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 55024, EN61000-6-1, EN61000-6-2, FCC Part 15 Subpart B Class B, ICES-003 Class B, VCCI Class B, C-tick AS/NZS CISPR 22, KCC Class A, UL/IEC/EN 60950-1
Weight	229 g (0.50 lb.)
Included accessories	Installation Guide, CD with installation tools, recording software and User's Manual, 4 Windows decoder 1-user license

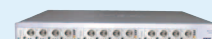*This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org)

More information is available at www.axis.com

Dimensions

255 mm (10")
30 mm (1.2")
129 mm (5.1")

Required hardware
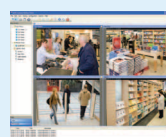
AXIS Q7900 Rack

AXIS 291 1U Video Server Rack

Optional accessories

AXIS T8310 Video Surveillance Control Board

For information on AXIS Camera Station and video management software from Axis' Application Development Partners, see www.axis.com/products/video/software/

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