

AXIS M4216-V Dome Camera

Varifocal 4 MP dome with deep learning

Featuring WDR and Lightfinder, this compact and discreet dome delivers great image quality in challenging light conditions. A deep learning processing unit (DLPU) lets you take advantage of intelligent analytics based on deep learning on the edge. Designed to blend into any environment, it can be repainted and offers a range of accessories for discreet monitoring. Plus, it features an HDMI port and the flexibility to add audio and I/O connectivity using AXIS T61 Series. Furthermore, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis devices on your network.

- > Great image quality in 4 MP
- > Varifocal lens with remote zoom and focus
- > Lightfinder and WDR
- > Analytics with deep learning
- > HDMI output for public viewing monitors









AXIS M4216-V Dome Camera

Camera			I/O: manual trigger, virtual input, digital input via AXIS T61 Audio	
Image sensor	1/2.7" progressive scan RGB CMOS		and I/O Interfaces with portcast technology	
Lens	Varifocal, 3–6 mm, F1.9 - 2.7		MQTT subscribe MQTT subscribe	
	Horizontal field of view: 100°-45° Vertical field of view: 72°-34°		Scheduled and recurring: scheduled event	
	Remote focus and zoom, fixed iris		Video: live stream open	
Day and night	Automatic IR-cut filter	Event actions	MQTT publish Notification: email, HTTP, HTTPS, TCP and SNMP trap	
Minimum	With Lightfinder:		Overlay text, zoom preset, day/night mode	
illumination	Color: 0.18 lux at 50 IRE F2.0 B/W: 0.03 lux at 50 IRE F2.0		Pre- and post-alarm video or image buffering for recording or upload	
Shutter speed	1/37500 s to 1/5 s		Record video: SD card and network share	
Camera angle	Pan +180°, tilt -40 to +65°, rotation +105°		Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, networ share and email External output activation via AXIS T61 Audio and I/O Interface with portcast technology	
adjustment	Can be directed in any direction and see the wall/ceiling			
System on chip	CV25		MQTT publish	
Model		Built-in	Remote zoom, remote focus	
Memory	1024 MB RAM, 512 MB Flash	installation aids		
Compute capabilities	Deep learning processing unit (DLPU)	Analytics		
Video		AXIS Object Analytics	Object classes: humans, vehicles (types: cars, buses, trucks, bikes)	
Video compression	H.264 (MPEG-4 Part 10/AVC) Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main and High Profiles Motion JPEG	,,,,,,	Features: line crossing, object in area, crossline countingBETA, occupancy in areaBETA, time in areaBETA Up to 10 scenarios Metadata visualized with color-coded bounding boxes	
Resolution	2304x1728 to 320x240		Polygon include/exclude areas	
Frame rate	Up to 25/30 fps with power line frequency 50/60 Hz in H.264 and H.265 $^{\rm a}$		Perspective configuration ONVIF Motion Alarm event	
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	Metadata	Object data: Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Confidence, position Event data: Producer reference, scenarios, trigger conditions	
	VBR/MBR H.264/H.265 Low latency mode HDMI	Applications	Included AXIS Object Analytics, AXIS Video Motion Detection, AXIS Face Detector, active tampering alarm	
Multi-view streaming	Up to 2 individually cropped out view areas in full frame rate		Supported AXIS Live Privacy Shield Support for AXIS Camera Application Platform enabling	
HDMI output	HDMI 1080p (16:9) @25/30 fps (50/60 Hz) HDMI 720p (16:9) @50/60 fps (50/60 Hz)		installation of third-party applications, see axis.com/acap	
Image settings	Compression, color, brightness, sharpness, contrast, white	Cybersecurity		
	balance, exposure control, motion-adaptive exposure, WDR: up to 110 dB depending on scene, text and image overlay, mirroring of images, privacy mask Rotation: 0°, 90°, 180°, 270°, including Corridor Format	Edge security	Software: Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption Hardware: Axis Edge Vault cybersecurity platform	
Pan/Tilt/Zoom	Digital PTZ		Secure element (CC EAL 6+), system-on-chip security (TEE), Axis device ID, secure keystore, signed video, secure boot, encrypted	
Audio			filesystem (AES-XTS-Plain64 256bit)	
Audio input/output	Audio features through portcast technology: two-way audio connectivity, voice enhancer	Network security	IEEE 802.1X (EAP-TLS) ^b , IEEE 802.1AR, HTTPS/HSTS ^b , TLS v1.2/v1.3 ^b , Network Time Security (NTS), X.509 Certificate PKI, IP address filtering	
Network	Connectivity, voice enhancer			
Security	IP address filtering, HTTPS ^b encryption, IEEE 802.1X (EAP-TLS) ^b network access control, user access log, centralized certificate management	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	
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS ^b , TLS ^b , 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, DHCP, ARP, SSH, HDMI, LLDP, CDP, MQTT v3.1.1, Link-Local address			
	(ZeroConf)	General		
System integro	rtion	Casing	IP42 water- and dust-resistant, IK08 impact-resistant, polycarbonate and aluminum casing with hard-coated dome	
Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at <i>axis.com</i> One-click cloud connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at <i>onvif.org</i>		Encapsulated electronics Color: white NCS S 1002-B For repainting instructions of casing and impact on warranty, contact your Axis partner.	
Event conditions		Sustainability	PVC free, BFR/CFR free, 43% recycled plastics	
Event conditions		Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 2 Typical 2.8 W, max 4.4 W	
		Connectors	RJ45 10BASE-T/100BASE-TX PoE HDMI type D Audio: Audio and I/O connectivity via portcast technology	

Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption	
	Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see axis.com	
Operating conditions	0 °C to 45 °C (32 °F to 113 °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 CISPR 24, CISPR 35, EN 55032 Class A, EN 55035, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), KC KN32 Class A, KC KN35, RCM AS/NZS CISPR 32 Class A, VCCI Class A Safety IEC/EN/UL 62368-1, CAN/CSA C22.2 No. 62368-1, IS 13252 Environment IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-6, IEC/EN 60529 IP42, IEC/EN 62262 IK08 Network NIST SP500-267	
Dimensions	Height: 71 mm (2.8 in) ø 121 mm (4.76 in)	
Weight	350 g (0.77 lb)	

Included accessories	Installation guide, Windows® decoder 1-user license
Optional accessories	AXIS TM3207 Recessed Mount AXIS T94C01L Recessed Mount AXIS T94C01U Universal Mount AXIS T94C01M J-Box/Gang Box Plate AXIS M42 Casing A Black 4P AXIS M42 Smoked Dome A 4P AXIS T91A33 Lighting Track Mount AXIS T91A23 Tile Grid Ceiling Mount AXIS TM3101 Pendant Wall Mount AXIS Surveillance Cards For more accessories, see axis.com
Video management software	AXIS Companion, AXIS Camera Station and video management software from Axis Application Development Partners. For more information, see axis.com/vms
Languages	English, German, French, Spanish, Italian, Russian, Japanese, Korean, Portuguese, Simplified Chinese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Warranty	5-year warranty, see axis.com/warranty

a. Reduced frame rate in Motion JPEG
 b. 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).

WWW.CXIS.COM T10170908/EN/M15.14/2306

Key features and technologies

AXIS Object Analytics

AXIS Object Analytics is a preinstalled, multifeatured video analytics that detects and classifies humans, vehicles, and types of vehicles. Thanks to Al-based algorithms and behavioral conditions, it analyzes the scene and their spatial behavior within – all tailored to your specific needs. Scalable and edge-based, it requires minimum effort to set up and supports various scenarios running simultaneously.

Axis Edge Vault

Axis Edge Vault is the hardware-based cybersecurity platform that safeguards the Axis device. It offers features to guarantee the device's identity and integrity and to protect your sensitive information from unauthorized access.

Establishing the root of trust starts at the device's boot process. In Axis devices, the hardware-based mechanism secure boot verifies the operating system (AXIS OS) that the device is booting from. AXIS OS, in turn, is cryptographically signed (signed firmware) during the build process. Secure boot and signed firmware tie into each other and ensure that the firmware has not been tampered with during the lifecycle of the device and that the device only boots from authorized firmware. This creates an unbroken chain of cryptographically validated software for the chain of trust that all secure operations depend on.

From a security aspect, the secure keystore is the critical building-block for protecting cryptographic information used for secure communication (IEEE 802.1X, HTTPS, Axis device ID, access control keys etc..) against malicious extraction in the event of a security breach. The secure keystore is provided through a Common Criteria and/or FIPS 140 certified hardware-based cryptographic computing module. Depending on security requirements, an Axis device can have either one or multiple such modules, like

a TPM 2.0 (Trusted Platform Module) or a secure element, and/or a system-on-chip (SoC) embedded Trusted Execution Environment (TEE).

Signed video ensures that video evidence can be verified as untampered without proving the chain of custody of the video file. Each camera uses its unique video signing key, which is securely stored in the secure keystore, to add a signature into the video stream. This allows video to be traced back to the Axis camera from where it originated, so it's possible to verify that the footage has not been tampered with after it left the camera.

To read more about Axis Edge Vault, go to axis.com/solutions/edge-vault.

Lightfinder

The Axis Lightfinder technology delivers high-resolution, full-color video with a minimum of motion blur even in near darkness. Because it strips away noise, Lightfinder makes dark areas in a scene visible and captures details in very low light. Cameras with Lightfinder discern color in low light better than the human eye. In surveillance, color may be the critical factor to identify a person, an object, or a vehicle.

Zipstream

The Axis Zipstream technology preserves all the important forensic in the video stream while lowering bandwidth and storage requirements by an average of 50%. Zipstream also includes three intelligent algorithms, which ensure that relevant forensic information is identified, recorded, and sent in full resolution and frame rate.

For more information, see axis.com/glossary

