AXIS M4308-PLE Panoramic Camera

12 MP outdoor-ready dome with audio capture

AXIS M4308-PLE is a discreet, outdoor-ready mini dome designed to blend seamlessly into any environment. With a 12 MP sensor and stereographic lens, it offers outstanding images and complete 360° panoramic overview. Thanks to Sharpdome 360, this panoramic camera delivers greater sharpness at the edges of the image. AXIS Object Analytics is included and a deep learning processing unit (DLPU) enables unique opportunities to take advantage of analytics based on deep learning on the edge. It includes Axis Lightfinder and Axis Forensic WDR for true colors and great details in challenging light or near darkness. Plus, Axis OptimizedIR for surveillance in pitch darkness. Four built-in microphones and voice enhancer offers audio capture with great noise suppression.

> 12 MP sensor with 360° overview

> Stereographic lens and Sharpdome 360

> Lightfinder, Forensic WDR, OptimizedIR

> Support for analytics with deep learning

> 4 microphones with voice enhancer

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Camera

Image sensor	1/1.7" progressive scan RGB CMOS
Lens	1.3 mm, F2.4 Horizontal field of view: 183° Vertical field of view: 183° Fixed iris, fixed focus, IR corrected
Day and night	Automatically removable infrared-cut filter
Minimum illumination	**Color:** 0.19 lux at 50 IRE, F2.4 **B/W:** 0.04 lux at 50 IRE, F2.4 0 lux with IR illumination on
Shutter speed	1/22000 s to 1 s
Camera angle adjustment	Digital roll: ± 180°

System on chip (SoC)

Model	ARTPEC-7
Memory	2 GB RAM, 1 GB Flash
Compute capabilities	Deep learning processing unit (DLPU)

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	Overview: 2880x2880 to 160x160 Panorama: 3840x2160 to 192x72 Double Panorama: 3584x2688 to 512x288 Quad view: 3584x2688 to 512x288 View area 1–4: 2048x1536 to 256x144 Corner right/left: 3200x1200 to 192x72 Double corner: 2560x1920 to 480x480 Corridor: 2560x1920 to 256x144
Frame rate	360° overview only, up to 2880x2880 without WDR: 25/30 fps @ 50/60 Hz 360° overview and dewarped views up to max resolution with WDR: up to 12.5/15 fps @ 50/60 Hz
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 Low latency mode
Multi-view streaming	360° overview, dewarped panorama, corridor, corner left/right and quad views. Up to 4 individually cropped out and dewarped view areas. All different views can be streamed simultaneously. When streaming 4 dewarped view areas and one 360° overview in max resolution: up to 19 fps per stream.
Image settings	Compression, color saturation, brightness, sharpness, contrast, local contrast, white balance, day/night threshold, tone mapping, exposure control (including automatic gain control), exposure zones, Forensic WDR: up to 120 dB depending on scene, fine tuning of low-light behavior, dynamic text and image overlay, mirroring, digital roll, polygon privacy masks
Pan/Tilt/Zoom	Digital PTZ of view areas, digital PT of panorama, corner, corridor and quad views, preset positions, guard tours

Audio

Audio streaming	One-way, simplex, mono or stereo. Voice enhancement
Audio encoding	LPCM 48 kHz, AAC-LC 8/16/32/44.1/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate
Audio input/output	4 built-in microphones (can be disabled), network speaker pairing

Network

Security	IP address filtering, HTTPS[a] encryption, IEEE 802.1x (EAP-TLS)[a] network access control, user access log, centralized certificate management, signed video, secure keystore (CC EAL4 certified)
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS[a], HTTP/2, 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, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SSH, SIP, 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®, metadata, and AXIS Camera Application Platform (ACAP); specifications at *axis.com/developer-community.* ACAP includes Native SDK and Computer Vision SDK. AXIS Guardian with One-Click Connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, ONVIF® Profile T specification at *onvif.org* Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX
Onscreen controls	Day/night shift Wide dynamic range Video streaming indicator IR illumination
Event conditions	Analytics, edge storage events, virtual inputs through API, supervised external inputs, open casing, audio detection MQTT subscribe
Event actions	Record video/audio: SD card and network share MQTT publish Upload of images or video/audio clips: FTP, SFTP, HTTP, HTTPS, network share and email Pre- and post-alarm video or image buffering for recording or upload Notification: email, HTTP, HTTPS, TCP and SNMP trap PTZ: PTZ preset, start/stop guard tour Overlay text, external output activation, play audio clip, zoom preset, day/night mode
Built-in installation aids	Pixel counter, digital roll, repositioning of quad views, digital PTZ of view areas, digital PT of panorama, corner, corridor and quad views

Analytics

AXIS Object Analytics	**Object classes**: humans, vehicles (types: cars, buses, trucks, bikes) **Trigger conditions**: line crossing, object in area Up to 10 scenarios Metadata visualized with trajectories and color-coded bounding boxes Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event
Metadata	**Object data**: Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Confidence, position **Event data**: Producer reference, scenarios, trigger conditions
Applications	**Included** AXIS Object Analytics, AXIS Video Motion Detection, active tampering alarm, audio detection **Supported** Support for additional applications if the device is used with compatible accessories. For more information, contact your Axis partner. 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, Axis Edge Vault with Axis device ID, signed video, secure keystore (CC EAL4+ certified hardware protection of cryptographic operations and keys)
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	IP66-, NEMA 4X- and IK10-rated (IR window IK09) Polycarbonate hard coated dome Sharpdome 360 Aluminum Color: white NCS S 1002-B For repainting instructions of skin cover or casing and impact on warranty, contact your Axis partner.
Sustainability	PVC free
Power	Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 Typical 7.9 W, max 15.5 W
Connectors	Shielded RJ45 10BASE-T/100BASE-TX PoE Terminal block for 1 supervised alarm input and 1 output (12 V DC output, max. load 25 mA)
IR illumination	OptimizedIR with with power-efficient, long-life 850 nm IR LEDs Range of reach 15 m (49 ft) or more depending on scene
Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Recording to network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*
Operating conditions	-40 °C to 50 °C (-40 °F to 122 °F) Start-up temperature: -30 °C to 50 °C (-22 °F to 122 °F) Maximum temperature (intermittent): 55 °C (131 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Humidity 10–100% RH (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 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, KS C9832 Class A, KS C9835 **Safety** IEC/EN/UL 60950-22, IEC/EN/UL 62368-1, IEC/EN 62471, IS 13252 **Environment** IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, 60068-2-78, IEC/EN 60529 IP66, IEC/EN 62262 IK10 (IR window IK09), NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9) **Network** IPv6 USGv6, NIST SP500-267
Dimensions	Height: 69 mm (2.7 in) ø 149 mm (5.8 in)
Weight	850 g (1.9 lb)
Included accessories	Installation guide, Windows® decoder 1-user license, drill hole template, cable gaskets, connector guard, I/O connector, RESISTORX® TR20 bit, mounting bracket, cable hole lid, view protector
Optional accessories	AXIS T94T02D Pendant kit with weathershield AXIS Surveillance Cards AXIS TM3808-E Skin Cover Black AXIS Mounts & Cabinets AXIS TM3204 Recessed Mount AXIS TM3206 Recessed Mount For more accessories, see *axis.com*
Video management software	AXIS Device Manager, 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

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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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