

## **AXIS M4327-P Panoramic Camera**

## 6 MP indoor fisheye with deep learning

AXIS M4327-P can deliver 360° or 180° panoramic views at up to 30 fps with no blind spots. The camera can stream up to four individual view areas simultaneously, with support for digital PTZ. Built on ARTPEC-8, it offers powerful artificial intelligence and deep learning analytics on the edge. Plus, thanks to AXIS Object Analytics, it can accurately detect and classify moving objects for more effective monitoring. The camera is delivered factory-focused and features digital roll functionality for easy installation. Furthermore, it's compact, discreet, and repaintable to blend in with any surroundings.

- > 180°/360° view up to 30 fps
- > 6 MP with stereographic lens
- > Support for digital PTZ views
- > Digital roll for easy installation
- > Support for advanced analytics





# AXIS M4327-P Panoramic Camera

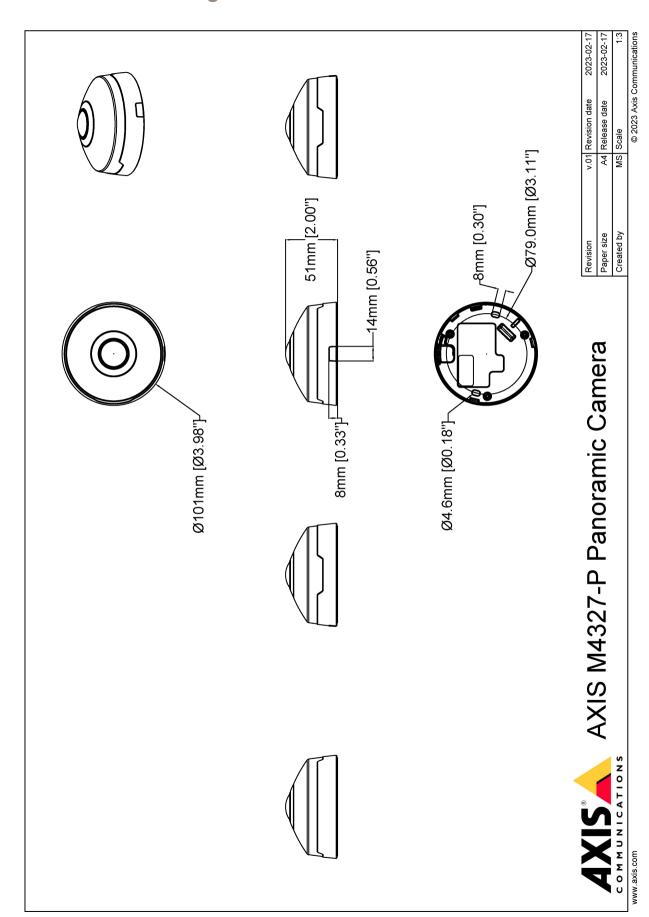
Camera			ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and	
Image sensor	1/1.8" progressive scan RGB CMOS		ONVIF® Profile T, specifications at <i>onvif.org</i> Support for Session Initiation Protocol (SIP) for integration with	
Lens	1.1 mm, F2.2 Horizontal field of view: 182° Vertical field of view: 182°	Video	Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX.  Compatible with AXIS Companion, AXIS Camera Station, video	
Day and night	Fixed iris, fixed focus, IR corrected  Automatic IR-cut filter	management	management software from Axis' Application Development	
Minimum	Color: 0.16 lux at 50 IRE, F2.2	systems	Partners available at axis.com/vms	
illumination	B/W: 0.03 lux at 50 IRE, F2.2	Onscreen controls	Privacy masks Media clip	
Shutter speed	1/33500 s to 1/5 s	Event conditions	Device status: above operating temperature, above or below	
Camera angle adjustment	Digital roll: ±180°		operating temperature, below operating temperature, within operating temperature, IP address removed, new IP address, network lost, system ready, live stream active	
System on chip	, ,		Edge storage: recording ongoing, storage disruption, storage	
Model	ARTPEC-8		health issues detected	
Memory	2048 MB RAM, 8192 MB Flash		I/O: manual trigger, virtual input MQTT: subscribe	
Compute capabilities	Deep learning processing unit (DLPU)		Scheduled and recurring: schedule Video: average bitrate degradation, day-night mode, tampering	
Video		Event actions	Day-night mode	
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		MQTT: publish Notification: HTTP, HTTPS, TCP and email Overlay text Recordings: SD card and network share	
Resolution	Overview: 2160x2160 to 160x160 (1:1) Panorama: 2560x1440 to 192x72 (8:3, 16:9 or 32:9) Double panorama: 2560x1920 to 256x192 (4:3 or 16:9) Quad view: 2560x1920 to 256x192 (4:3 or 16:9) View area 1-4: 1920x1440 to 256x144 (4:3 or 16:9) Corner left/right: 2368x1184 to 192x72 (2:1 or 8:3) Double corner: 2016x2016 to 256x192 (1:1 or 4:3) Corridor: 2560x1920 to 256x144 (4:3 or 16:9)		SNMP traps: send, send while the rule is active Status LED Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email WDR mode	
		Built-in installation aids	Pixel counter, digital roll, level grid	
Frame rate	360° overview only up to max resolution without WDR:	Analytics		
	50/60 fps @ 50/60 Hz 360° overview and 4 dewarped views up to max resolution with WDR: up to 25/30 fps @ 50/60 Hz	Applications	Included AXIS Object Analytics, AXIS Scene Metadata, AXIS Video Motion Detection, active tampering alarm	
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	AX Su ins	Supported AXIS People Counter Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap	
	VBR/ABR/MBR H.264/H.265 Video streaming indicator	AXIS Object Analytics	<b>Object classes:</b> humans, vehicles (types: cars, buses, trucks, bikes)	
WDR	Forensic WDR: Up to 120 dB depending on scene		Scenarios: line crossing, object in area Up to 10 scenarios Other features: triggered objects visualized with trajectories, color-coded bounding boxes and tables Polygon include/exclude areas ONVIF Motion Alarm event	
Noise reduction	Spatial filter (2D noise reduction) Temporal filter (3D noise reduction)			
Image settings	Saturation, contrast, brightness, sharpness, local contrast, tone mapping, white balance, day/night threshold, exposure mode, exposure zones, compression, mirroring, dynamic text and image	AXIS Scene		
Image processing	overlay, and polygon privacy mask  Axis Zipstream, Forensic WDR	Metadata	Object classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Object attributes: vehicle color, confidence, position	
	Digital PTZ of view areas, digital PT of panorama, corner, corridor	Approvals		
Pan/Tilt/Zoom	and quad views, preset positions, guard tours		CSA, UL/cUL, BIS, UKCA, CE, KC	
Audio		Supply chain	TAA compliant	
Audio features	Network speaker pairing	EMC	EN 55032 Class A, EN 55035, EN 61000-6-1, EN 61000-6-2	
Audio input/output	Audio features through portcast technology: two-way audio connectivity, voice enhancer	LIVIC	Australia/New Zealand: RCM AS/NZS CISPR 32 Class A Canada: ICES-3(A)/NMB-3(A)	
Network			Japan: VCCI Class A	
Network	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPSa, HTTP/2, TLSa,		Korea: KS C 9835, KS C 9832 Class A USA: FCC Part 15 Subpart B Class A	
protocols	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, TCP, UDP, IGMPv1/v2/v3, RTCP, DHCPv4/v6, SSH, LLDP, CDP, MQTT v3.1.1, Syslog, Link-Local address (ZeroConf), IEEE 802.1X (EAP-TLS), IEEE 802.1AR	Safety	IEC/EN/UL 62368-1 ed. 3, CAN/CSA C22.2 No. 62368-1 ed. 3, IS 13252	
		Environment	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14 IEC 60068-2-7, IEC 60068-2-78	
System integra	tion	Network	NIST SP500-267	
Application	Open API for software integration, including VAPIX®, metadata	Cybersecurity	ETSI EN 303 645	
Programming Interface	and AXIS Camera Application Platform (ACAP); specifications at axis.com/developer-community. ACAP includes Native SDK and Computer Vision SDK. One-click cloud connection	Cybersecurity		
		Edge security	Software: Signed OS, brute force delay protection, digest	
		,	authentication and OAuth 2.0 RFC6749 OpenID Authorization	

	Code Flow for centralized ADFS account management, password protection, AES-XTS-Plain64 256bit SD card encryption Hardware: Axis Edge Vault cybersecurity platform Secure element (CC EAL 6+), system-on-chip security (TEE), Axis device ID, secure keystore, signed video, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2) <sup>a</sup> , IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS <sup>a</sup> , TLS v1.2/v1.3 <sup>a</sup> , Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
Documentation	AXIS OS Hardening Guide Axis Vulnerability Management Policy Axis Security Development Model To download documents, go to axis.com/support/cybersecurity/resources To read more about Axis cybersecurity support, go to axis.com/cybersecurity
General	
Casing	Plastic casing, encapsulated electronics Color: white NCS S 1002-B For repainting instructions of the casing and information about the impact on warranty, contact your Axis partner.
Mounting	Mounting bracket with junction box holes (double-gang, single-gang, and 4" octagon)
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 3.5 W, max 5.1 W
Connectors	Network: Shielded RJ45 10BASE-T/100BASE-TX POE Audio: Audio and I/O connectivity via portcast technology
Storage	Support for microSD/microSDHC/microSDXC card Recording to network-attached storage (NAS) For SD card and NAS recommendations, see axis.com
Operating conditions	0 °C to 40 °C (32 °F to 104 °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)
Dimensions	Height: 51 mm (2.0 in) ø 101 mm (4.0 in)
Weight	300 g (0.66 lb)

Box content	Camera, installation guide, owner authentication key		
Optional accessories	AXIS TM3820 Vandal Casing (IK08, IP42 with cover hatch, IP41 without cover hatch) AXIS TM3210 Recessed Mount AXIS TM3211 Recessed Mount AXIS T94 mounting accessories AXIS T91 mounting accessories AXIS Surveillance Cards For more accessories, go to axis.com/products/axis-m4327-p#accessories		
System tools	AXIS Site Designer, AXIS Device Manager, product selector, accessory selector, lens calculator Available at axis.com		
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese		
Warranty	5-year warranty, see axis.com/warranty		
Part numbers	Available at axis.com/products/axis-m4327-p#part-numbers		
Sustainability			
Substance control	PVC free, BFR/CFR free in accordance with JEDEC/ECA Standard JS709 ROHS in accordance with EU ROHS Directive 2011/65/EU/ and EN 63000:2018 REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see axis.com/partner.		
Materials	Renewable carbon-based plastic content: 73% (recycled) Screened for conflict minerals in accordance with OECD guidelines To read more about sustainability at Axis, go to axis.com/about-axis/sustainability		
Environmental responsibility	axis.com/environmental-responsibility Axis Communications is a signatory of the UN Global Compact, read more at unglobalcompact.org		

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).

# **Dimension drawing**



WWW.cxis.com T10186367/EN/M12.2/2406

## Highlighted capabilities

### **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 forms the foundation that all secure operations depend on and offer features to protect the device's identity, safeguard its integrity and protect sensitive information from unauthorized access. For instance, secure boot ensures that a device can boot only with signed OS, which prevents physical supply chain tampering. With signed OS, the device is also able to validate new device software before accepting to install it. And 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 and secure connections are provided through a Common Criteria or FIPS 140 certified hardware-based cryptographic computing module.

Furthermore, signed video ensures that video evidence can be verified as untampered. Each camera uses its unique video signing key, which is securely stored in the secure keystore, to add a signature into the video stream allowing video to be traced back to the Axis camera from where it originated.

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

#### Forensic WDR

Axis cameras with wide dynamic range (WDR) technology make the difference between seeing important forensic details clearly and seeing nothing but a blur in challenging light conditions. The difference between the darkest and the brightest spots can spell trouble for image usability and clarity. Forensic WDR effectively reduces visible noise and artifacts to deliver video tuned for maximal forensic usability.

### **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

