AXIS P3268-SLVE Dome Camera

Stainless steel 8 MP dome with deep learning

Enclosed in a marine-grade, stainless steel casing, this robust and DNV-certified camera can withstand the corrosive effects of seawater and cleaning chemicals. Easy to clean and maintain, it's certified by NSF/ANSI to Standard 169 (Special Purpose Food Equipment and Devices) for use in food processing facilities. With Lightfinder 2.0, Forensic WDR, and OptimizedIR, it delivers excellent 4K image quality under any light conditions. And a deep learning processing unit offers improved processing and storage capabilities. Furthermore, it includes Axis Edge Vault, a hardware-based cybersecurity platform that guarantees the device's integrity and protects it from unauthorized access.

- > Marine-grade stainless steel casing
- > NFS/ANSI Standard 169 certified
- > DNV-certified for maritime environments
- > Excellent image quality in 4K
- > Support for analytics with deep learning

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Camera

Image sensor	1/1.8" progressive scan RGB CMOS
Lens	Varifocal, 4.3–8.6 mm, F1.5 Horizontal field of view: 100°–53° Vertical field of view: 54°–30° Minimum focus distance: 50 cm (20 in) IR corrected, remote zoom and focus, P-Iris control
Day and night	Automatically removable infrared-cut filter
Minimum illumination	**With Forensic WDR and Lightfinder 2.0:** **Color:** 0.14 lux at 50 IRE, F1.5 **B/W:** 0 lux at 50 IRE, F1.5
Shutter speed	1/8500 s to 1/5 s
Camera angle adjustment	Pan ±190°, tilt -10 to +80°, rotation ±190°

System on chip (SoC)

Model	ARTPEC-8
Memory	2048 MB RAM, 8192 MB 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	3840x2160 to 160x90
Frame rate	25/30 fps with power line frequency 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 Video streaming indicator
Multi-view streaming	Up to 2 individually cropped out view areas in full frame rate
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: up to 120 dB depending on scene, white balance, day/night threshold, local contrast, tone mapping, exposure mode, exposure zones, defogging, barrel distortion correction, compression, rotation: 0°, 90°, 180°, 270° including Corridor Format, mirroring, dynamic text and image overlay, privacy masks, polygon privacy mask
Pan/Tilt/Zoom	Digital PTZ, preset positions

Audio

Audio streaming	Audio in, simplex, two-way audio via edge-to-edge technology
Audio encoding	24bit LPCM, 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	External microphone input, line input, digital input with ring power, automatic gain control, 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
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, RTCP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, DHCPv4/v6, ARP, SSH, SIP, 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* 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 Defogging Wide dynamic range Video streaming indicator IR illumination
Event conditions	Analytics, external input, supervised external input, virtual inputs through API Call: state, state change Device status: above operating temperature, above or below operating temperature, below operating temperature, within operating temperature, IP address removed, new IP address, network lost, system ready, ring power overcurrent protection, live stream active, casing open Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal okay Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: digital input, manual trigger, virtual input MQTT: subcribe Scheduled and recurring: schedule Video: average bitrate degradation, day-night mode, live stream open, tampering
Event actions	Overlay text, external output activation, zoom preset, day/night mode, flash status LED, use lights, set defog mode, set WDR mode Calls: end SIP call, make SIP call, answer call I/O: toggle I/O once, toggle I/O while the rule is active MQTT: publish Notification: email, HTTP, HTTPS, TCP, and SNMP trap Pre- and post-alarm video or image buffering for recording or upload Record video: SD card and network share Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share, and email
Built-in installation aids	Remote zoom and focus, straighten image, pixel counter, level grid

Analytics

AXIS Object Analytics	**Object classes**: humans, vehicles (types: cars, buses, trucks, bikes) **Trigger conditions**: line crossing, object in area, time in area[BETA] Up to 10 scenarios Metadata visualized with 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 Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

Approvals

Product markings	BIS, CE, DNV, NFS, KC, RCM, UL/cUL, UKCA, VCCI, WEEE
Supply chain	TAA compliant
EMC	EN 50121-4, EN 55032 Class A, EN 55035, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2 **Australia/New Zealand:** RCM AS/NZS CISPR 32 Class A **Canada:** ICES-3(A)/NMB-3(A) **Japan:** VCCI Class A **Korea:** KC KN32 Class A, KC KN35 **USA:** FCC Part 15 Subpart B Class A **Railway:** IEC 62236-4
Safety	CAN/CSA C22.2 No. 62368-1 ed. 3, IEC/EN/UL 62368-1 ed. 3, IEC 62471, IS 13252
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, IEC/EN 60529 IP66, IEC/EN 60529 IP67, ISO 20653 IP6K9K, IEC/EN 62262 IK11 (50J), NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9)

Network	NIST SP500-267
Certifications	**DNV:** EMC B, enclosure C, humidity B, temperature D, vibration A **Certificate:** TAA00003C6 **NSF:** **Certificate:** C0759806

Cybersecurity

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 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)[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* To download documents, go to *axis.com/support/cybersecurity/resources* To read more about Axis cybersecurity support, go to *axis.com/cybersecurity*

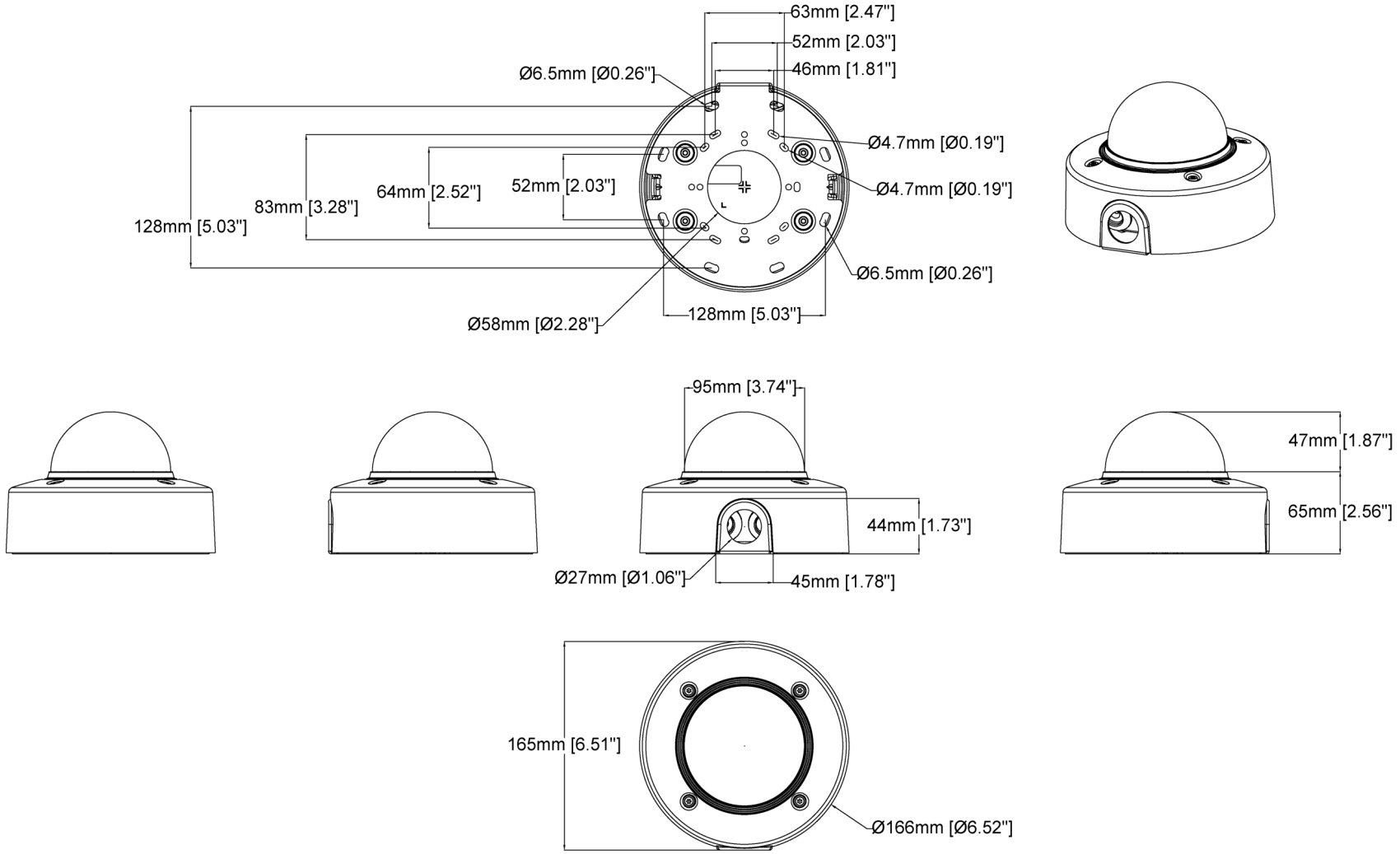
General

Casing	IP6K9K-, IP66-, IP67- and NEMA 4X-rated, IK11 (50 joules) impact-resistant stainless steel casing Polycarbonate hard-coated dome and dehumidifying membranes Electropolished SS 316L stainless steel Encapsulated electronics Captive stainless steel screws
Mounting	Mounting bracket with junction box holes (double-gang, single-gang, and 4" octagon) and for wall or ceiling mount ¾" (M25) conduit side entry
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 5.5 W , max 11.2 W
Connectors	RJ45 10BASE-T/100BASE-TX PoE I/O: 4-pin 2.5 mm (0.098 in) terminal block for 1 supervised digital input and 1 digital output (12 V DC output, max. load 25 mA) Audio: 3.5 mm mic/line in
IR illumination	OptimizedIR with power-efficient, long-life 850 nm IR LEDs Range of reach 40 m (130 ft) or more depending on the 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) Maximum temperature according to NEMA TS 2 (2.2.7) : 74 °C (165 °F) Start-up temperature: -30 °C to 50 °C (-22 °F to 122 °F) Humidity 10–100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
Dimensions	Height: 112 mm (4.43 in) ø 166 mm (6.52 in)
Weight	1.76 Kg (3.88 lb)
Box content	Installation guide, Windows® decoder 1-user license, RESISTORX® T20 screw bit, terminal block connectors for DC and I/O, ø5-15mm cable gasket, connector guard, ø3-5mm cable gasket, plugs
Optional accessories	AXIS T91F61 Wall Mount, T91F67 Pole Mount, AXIS T94U01D Pendant Kit, AXIS T94U02D Pendant Kit, AXIS TP3824-E Dome Clear/Smoked, AXIS T8355 Digital Microphone 3.5 mm AXIS Surveillance Cards For more accessories, go to *axis.com/products/axis-p3268-slve#accessories*
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, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese
Warranty	5-year warranty, see *axis.com/warranty*
Part numbers	Available at *axis.com/products/axis-p3268-slve#part-numbers*

Sustainability

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 *echa.europa.eu*
Materials	Renewable carbon-based plastic content: 13.2% (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).*



AXIS P3268-SLVE

Revision	v.01	Revision date	2023-07-14
Paper size	A4	Release date	2023-07-14
Created by	MF	Scale	1:4

Key features and technologies

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 offers features to protect the device's identity, safeguard its integrity from factory and protect 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*.

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.

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.

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.

AXIS Object Analytics

AXIS Object Analytics is a preinstalled, multifeatured video analytics that detects and classifies humans, vehicles, and types of vehicles. Thanks to AI-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.

OptimizedIR

Axis OptimizedIR provides a unique and powerful combination of camera intelligence and sophisticated LED technology, resulting in our most advanced camera-integrated IR solutions for complete darkness. In our pan-tilt-zoom (PTZ) cameras with OptimizedIR, the IR beam automatically adapts and becomes wider or narrower as the camera zooms in and out to make sure that the entire field of view is always evenly illuminated.

For more information, see *axis.com/glossary*