

# **AXIS Q3538-SLVE Dome Camera**

## Stainless steel 8 MP dome for corrosive areas

Enclosed in marine-grade stainless steel (SS 316L), DNV-certified casing, this robust camera is resistant to the corrosive effects of sea water and cleaning chemicals. Plus, it's protected against redirection, defocusing, and impacts and can withstand wide temperatures ranges. It offers outstanding image quality in superior 4K resolution under any light conditions. Featuring a deep learning processing unit (DLPU), it supports advanced analytics based on deep learning on the edge. And, thanks to AXIS Object Analytics, it can detect and classify people, and different types of vehicles—all tailored to specific needs. Furthermore, built-in cybersecurity features help safeguard your system.

- > Ideal for corrosive and harsh conditions
- > Marine-grade stainless steel casing
- > Outstanding image quality in 4K
- > Support for analytics with deep learning
- > Built-in cybersecurity features







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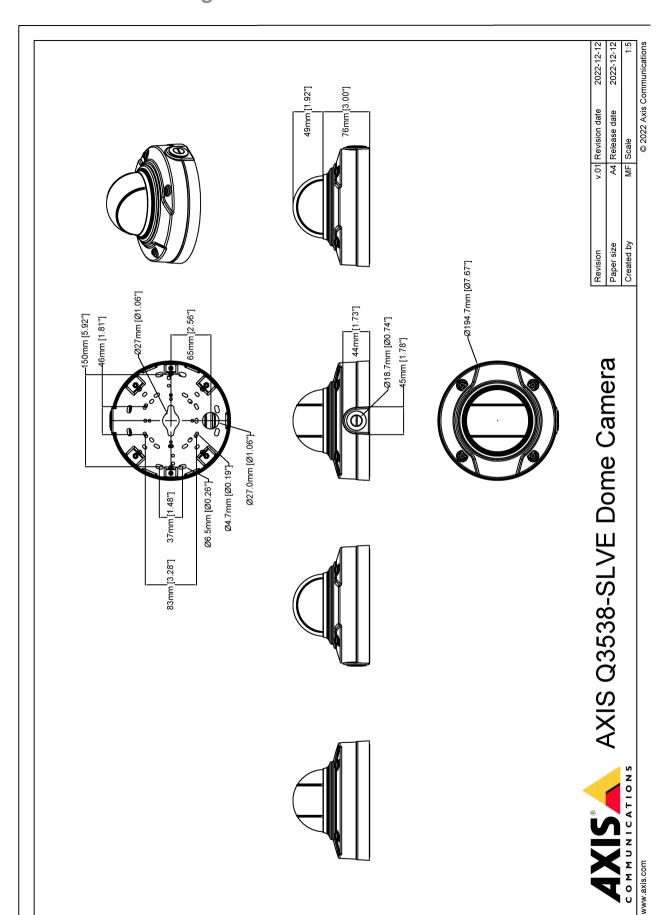
Camera		System integra	rtion	
Image sensor	1/1.2" progressive scan RGB CMOS Pixel size 2.9 μm	Application Programming	ication Open API for software integration, including VAPIX®, metadata ramming and AXIS Camera Application Platform (ACAP); specifications at	
Lens	Varifocal, 6.2–12.9 mm, F1.6–2.9 Horizontal field of view: 103°–49° Vertical field of view: 56°–28° Varifocal, Remote focus and zoom, P-Iris control, IR corrected	Interface		
Day and night	Automatically removable infrared-cut filter	Video	AXIS Companion, AXIS Camera Station, video management	
Minimum illumination	Color: 0.07 lux at 50 IRE, F1.6 B/W: 0 lux at 50 IRE, F1.6	management systems	software from Axis Application Development Partners available at axis.com/vms	
Shutter speed	1/66500 s to 2 s	Onscreen	Electronic image stabilization	
Camera angle adjustment	Pan ±180°, tilt -43 to +80°, rotation ±175°	controls	Day/night shift Defogging Wide dynamic range Video streaming indicator	
System on chip				
Model	ARTPEC-8		IR illumination Heater	
Memory	2048 MB RAM, 8194 MB Flash	Event conditions		
Compute capabilities	Deep learning processing unit (DLPU)	Event conditions	events, virtual inputs through API  Audio: audio detection, audio clip playing	
Video			Call: state, state change	
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		Device status: above operating temperature, above or below operating temperature, lP addres removed, network lost, new IP address, shock detected, casing open, storage failure, system ready, within operating temperature. Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal oka Edge storage: recording ongoing, storage disruption, storage	
Resolution	16:9: 3840x2160 to 160x90 16:10: 1280x800 to 160x100 4:3: 2880x2160 to 160x120			
Frame rate	With WDR: 25/30 fps with power line frequency 50/60 Hz Without WDR: 50/60 fps with power line frequency 50/60 Hz		health issues detected I/O: digital input, manual trigger, virtual input MQTT subscribe	
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		MQTT: stateless Scheduled and recurring: schedule Video: tampering, average bitrate degradation, day-night mode, live stream open	
	Low latency mode Video streaming indicator	Event actions		
WDR	Forensic WDR: Up to 120 dB depending on scene			
Multi-view streaming	Up to 8 individually cropped out view areas			
Image settings	Saturation, contrast, brightness, sharpness, white balance, day/night threshold, tone mapping, exposure mode, exposure zones, defogging, barrel distortion correction, electronic image stabilization, compression, rotation: 0°, 90°, 180°, 270° including Corridor Format, mirroring, text and image overlay, dynamic text and image overlay, privacy masks, polygon privacy mask		Calls: end SIP call, make SIP call, answer call MQTT publish Overlay text, external output activation, play audio clip, zoom preset, day/night mode, make call, flash status LED, use lights, set defog mode, send MQTT publish message, set WDR mode	
Image processing	Axis Zipstream, Forensic WDR, Lightfinder 2.0, OptimizedIR	Built-in installation aids	Leveling assistant, straighten image, image grid, pixel counter	
Pan/Tilt/Zoom	Digital PTZ, optical zoom, preset positions		Object classes: humans, vehicles (types: cars, buses, trucks, bikes) Features: line crossing, object in area, crossline countingBETA,	
	Limited guard tour, control queue, on-screen directional indicator Tour recording (max 10, max duration 16 minutes each), guard tour (max 100) 2x optical zoom	Analytics AXIS Object Analytics		
Audio			occupancy in area <sup>BETA</sup> , time in area <sup>BETA</sup>	
Audio streaming	Configurable duplex: Two-way (full duplex)		Up to 10 scenarios Metadata visualized with trajectories, color-coded bounding boxes and tables	
Audio encoding	24bit LPCM, AAC-LC 8/16/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate		Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event	
Audio input/output	External microphone input or line input (balanced or unbalanced), line output, digital audio input, automatic gain control Microphone power:  Microphone power 5V on tip, ring power 12V on ring, phantom power 12V on tip/ring	Metadata	Object data: Classes: humans, faces, vehicles (types: cars, buses trucks, bikes), license plates Confidence, position Event data: Producer reference, scenarios, trigger conditions	
Network	pharton power 124 on apping	Applications	Included AXIS Object Analytics	
Network	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS, HTTP/2, TLS, QoS		AXIS Video Motion Detection, active tampering alarm, audio detection Supported	
protocols	Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, RTSP, RTCP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, DHCPv4/v6, ARP, SSH, SIP, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)			

Support for AXIS Camera Application Platform enabling	
installation of third-party applications, see axis.com/acap	

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Approvals	
Product markings	BIS, CE, KC, RCM, UL/cUL, UKCA, VCCI, WEEE
Supply chain	TAA compliant
EMC	CISPR 35, 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 USA: FCC Part 15 Subpart B Class A Railway: IEC 62236-4
Safety	CAN/CSA-C22.2 No. 60950-22, CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, 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, IEC/EN 60529 IP68, ISO 20653 IP6K9K, IEC/EN 62262 IK11 (50J), NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9), DNV
Network	NIST SP500-267
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 TPM 2.0 (CC EAL4+, FIPS 140-2 Level 2), 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), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, 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	IP6K9K-, IP66-, IP67-, IP68- 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, 4" square, and 4" octagon) 3/4" (M25) conduit side entry
Power	Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 Typical 9 W, max 23 W 10–28 V DC, typical 9 W, max 24 W
Connectors	Audio: 3.5 mm mic/line in, 3.5 mm line out

	I/O: Terminal block for two configurable supervised inputs / digital outputs (12 V DC output, max load 50 mA) Network: Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE Power: DC input
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	-50 °C to 55 °C (-58 °F to 131 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Start-up temperature: -40 °C (-40 °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: 125 mm (4.9 in) ø 195 mm (7.7 in)
Weight	2.2 kg (4.9 lb)
Box content	Installation guide, Windows® decoder 1-user license, drill template, terminal block connectors for DC and I/O, RESISTORX® L-key, connector guard, ф5-15mm cable gaskets, ф3-5mm cable gasket, mounting bracket
Optional accessories	AXIS T03807-E Dome Smoked AXIS T03807-E Dome Clear AXIS T91F61 Wall Mount AXIS T91F67 Pole Mount AXIS T94U02D Pendant Kit with weathershield AXIS T94U01D Pendant Kit AXIS Multicable B I/O Audio Power AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards For more accessories, , go to axis.com/products/axis-q3538-slve#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-q3538-slve#part-numbers
Sustainability	
Substance control	PVC free 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.
Environmental responsibility	axis.com/environmental-responsibility Axis Communications is a signatory of the UN Global Compact, read more at unglobalcompact.org

# **Dimension drawing**



www.cxis.com T10185353/EN/M10.8/2306

# Key features and technologies

### 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.

#### **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 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.

### 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

