

# **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







# **AXIS Q3538-SLVE Dome Camera**

### Camera

# Image sensor

1/1.2" progressive scan RGB CMOS Pixel size 2.9 μm

#### 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

#### Day and night

Automatically removable infrared-cut filter

### Minimum illumination

**Color:** 0.07 lux at 50 IRE, F1.6 **B/W:** 0 lux at 50 IRE, F1.6

### Shutter speed

1/66500 s to 2 s

### Camera adjustment

Pan  $\pm 180^{\circ}$ , tilt -43 to +80°, rotation  $\pm 175^{\circ}$ 

# System on chip (SoC)

### Model

ARTPEC-8

### Memory

2048 MB RAM, 8194 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

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

### 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

#### **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

# Image processing

Axis Zipstream, Forensic WDR, Lightfinder 2.0, OptimizedIR

# Pan/Tilt/Zoom

Digital PTZ, optical zoom, preset positions 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

### **Audio**

## Audio features

Automatic gain control Speaker pairing

### Audio streaming

Configurable duplex: Two-way (full duplex)

### 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

# Audio input/output

External microphone input or line input (balanced or unbalanced), line output, digital audio input Microphone power:

Microphone power 5V on tip, ring power 12V on ring, phantom power 12V on tip/ring

# **Network**

# **Network protocols**

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS<sup>1</sup>, HTTP/2, TLS<sup>1</sup>, QoS 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)

# 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.

One-click cloud connection
ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T specification at *onvif.org* 

### Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at axis.com/vms.

### Onscreen controls

Electronic image stabilization Day/night shift Defogging Wide dynamic range Video streaming indicator IR illumination Heater

### Edge-to-edge

Speaker pairing

### **Event conditions**

Analytics, external input, supervised external input, edge storage events, virtual inputs through API Audio: audio detection, audio clip playing

Call: state, state change

Device status: above operating temperature, above or below operating temperature, below operating temperature, IP address 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 okay

Edge storage: recording ongoing, storage disruption, storage health issues detected

I/O: digital input, manual trigger, virtual input

MQTT subscribe MQTT: stateless

Scheduled and recurring: schedule

Video: tampering, average bitrate degradation, daynight mode, live stream open

### **Event actions**

I/O: toggle I/O once, toggle I/O while the rule is active Record video: SD card and network share Upload of images or video 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 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

### **Built-in installation aids**

Leveling assistant, straighten image, image grid, pixel counter

# **Analytics**

# **Applications**

Included

AXIS Object Analytics, AXIS Scene Metadata, AXIS Image Health Analytics, AXIS Live Privacy Shield<sup>2</sup>, AXIS Video Motion Detection, active tampering alarm, audio detection

### Supported

**AXIS** License Plate Verifier

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

- 1. 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).
- 2. Available for download

# **AXIS Object Analytics**

Object classes: humans, vehicles (types: cars, buses,

trucks, bikes, other)

Scenarios: line crossing, object in area, time in area, crossline counting, occupancy in area, motion in area,

motion line crossing Up to 10 scenarios

Other features: triggered objects visualized with trajectories, color-coded bounding boxes and tables

Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event

# **AXIS Image Health Analytics**

**Detection settings:** 

Tampering: blocked image, redirected image

Image degradation: blurred image, underexposed image

Other features: sensitivity, validation period

### **AXIS Scene Metadata**

Object classes: humans, faces, vehicles (types: cars,

buses, trucks, bikes), license plates

Object attributes: vehicle color, upper/lower clothing

color, confidence, position

# **Approvals**

**Product markings** 

BIS, CE, DNV, NSF, 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)

#### Network

NIST SP500-267

### Cybersecurity

ETSI EN 303 645, BSI IT Security Label, FIPS 140

### **Certifications**

DNV:

EMC B, enclosure C, humidity B, temperature D,

vibration A

Certificate: TAA00003C6

NSF:

Certificate: C0759806

# 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, Axis Cryptographic Module (FIPS 140–2 level 1), 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, PEAP-MSCHAPv2)<sup>3</sup>, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS<sup>3</sup>, TLS v1.2/v1.3<sup>3</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
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

<sup>3.</sup> 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).

# 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) <sup>3</sup>/<sub>4</sub>" (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 I FDs

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  $^{\circ}$ C (165  $^{\circ}$ 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,  $\phi$ 5-15mm cable gaskets,  $\phi$ 3-5mm cable gasket, mounting bracket, plugs

# **Optional accessories**

AXIS TQ3807-E Dome Smoked

AXIS TQ3807-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/axisq3538-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

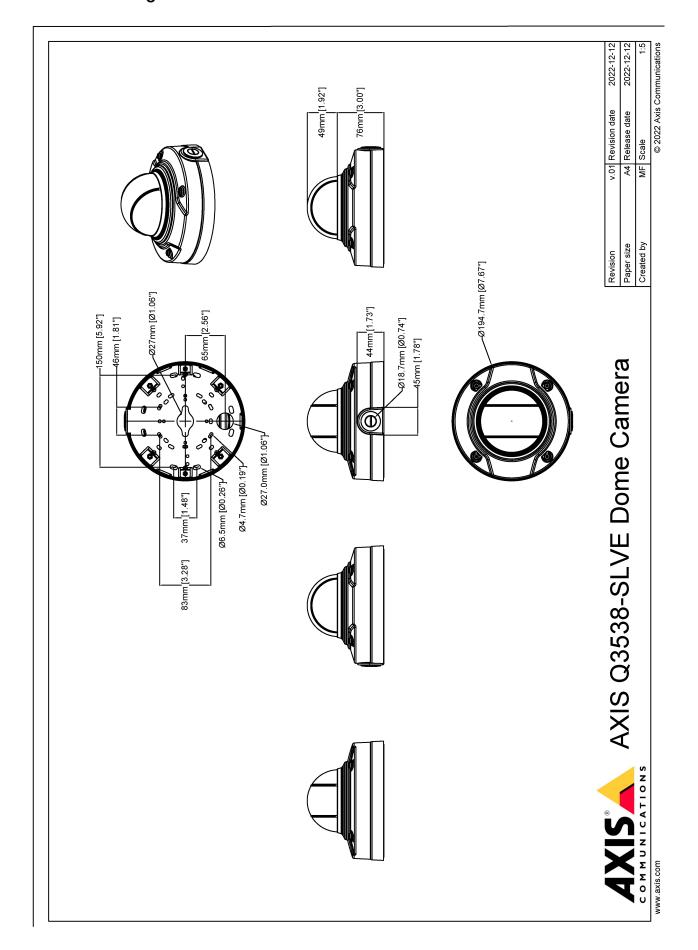
PVC free

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/M24.2/202504

# Highlighted capabilities

# 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 information cryptographic 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 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.

### **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

