

AXIS M3216-LVE Dome Camera

Affordable surveillance in 4 MP with deep learning

This cost-effective fixed focal dome offers Lightfinder, Forensic WDR, and OptimizedIR, and ensures excellent image quality under any light conditions. Built on ARTPEC-8, it includes a deep learning processing unit enabling powerful analytics based on deep learning on the edge. Plus, it delivers valuable metadata facilitating fast, easy, and efficient forensic search capabilities. And AXIS Object Analytics offers detection and classification of humans, vehicles, and types of vehicles—all tailored to your specific needs. Featuring audio and I/O connectivity, you can integrate for instance a microphone to extend the value of your system. Furthermore, built-in cybersecurity features safeguard your system.

- > **Excellent image quality in 4 MP**
- > **Lightfinder, Forensic WDR, OptimizedIR**
- > **Analytics with deep learning**
- > **Audio and I/O connectivity**
- > **Built-in cybersecurity features**



AXIS M3216-LVE Dome Camera

Camera

Image sensor

1/2.7" progressive scan RGB CMOS

Lens

2.9 mm, F2.0
Horizontal field of view: 102°
Vertical field of view: 73°
Minimum focus distance: 1.0 m (3.3 ft)
Fixed iris, IR corrected

Day and night

Automatic IR-cut filter
Hybrid IR filter

Minimum illumination

With WDR and Lightfinder:
Color: 0.16 lux at 50 IRE, F2.0
B/W: 0 lux at 50 IRE, F2.0
0 lux with IR illumination on

Shutter speed

1/50000 s to 1/5 s

Camera adjustment

Pan $\pm 190^\circ$, tilt -10 to $+80^\circ$, rotation $\pm 190^\circ$

System on chip (SoC)

Model

ARTPEC-8

Memory

1024 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

16:9: 2688x1512 to 160x90
4:3: 2304x1728 to 160x120

Frame rate

Up to 30/25 fps (60/50 Hz) in all resolutions

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

Up to 8 individually cropped out view areas

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, polygon privacy mask

Pan/Tilt/Zoom

Digital PTZ

Audio

Audio streaming

Two-way audio via edge-to-edge technology

Audio encoding

AAC 8/16/32/44.1/48 kHz, G.711 8 kHz, G.726 8 kHz, Opus 8/16/48 kHz, LPCM 48 kHz
Configurable bit rate

Audio input/output

External microphone input or line input, ring power, digital audio input, automatic gain control
Network speaker pairing

Network

Network protocols

IPv4, IPv6, USGv6, ICMPv4/ICMPv6, HTTP, HTTPS¹, HTTP/2, TLS¹, 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, SOCKS, 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® 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.

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

Day/night shift

Defogging

Wide dynamic range

Video streaming indicator

IR illumination

Enable-disable all privacy masks

Play media clip

Event conditions

Analytics, external input, supervised external input, virtual inputs through API

Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal okay

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

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

Call: state, state change

Video: average bitrate degradation, day-night mode, live stream open, tampering

Audio: audio detection, audio clip playing, audio clip currently playing

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

Scheduled and recurring: schedule

MQTT: stateless

Event actions

Overlay text, day/night mode, flash status LED, use lights, set defog mode, set WDR mode

I/O: toggle I/O once, toggle I/O while the rule is active

MQTT: publish

Notification: HTTP, HTTPS, TCP and email

Audio clips: play, stop

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

Calls: answer call, end SIP call, make SIP call

SNMP traps: send, send while the rule is active

Data streaming

Event data

Built-in installation aids

Pixel counter, straighten image, level grid

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 (ey@cryptsoft.com).

Analytics

Applications

Included

AXIS Object Analytics, AXIS Scene Metadata, AXIS Image Health Analytics, AXIS Video Motion Detection, active tampering alarm, audio detection
AXIS Live Privacy Shield

Supported

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

AXIS Object Analytics

Object classes: humans, vehicles (types: cars, buses, trucks, bikes)

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

EMC

EN 55032 Class A, 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 KN35KC, KN32 Class A

USA: FCC Part 15 Subpart B Class A

Safety

IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IEC 62471
risk group exempt, 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 62262 IK10, 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

Cybersecurity

Edge security

Software: Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, Axis Cryptographic Module (FIPS 140-2 level 1)

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)², IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS², TLS v1.2/v1.3², 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

General

Casing

IP66-, NEMA 4X- and IK10-rated

Polycarbonate hard-coated dome

Plastic casing, sunshield (PC/ASA)

Color: white NCS S 1002-B

For repainting instructions, go to the product's support page. For information about the impact on warranty, go to axis.com/warranty-implication-when-repainting. This product can be repainted.

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (ey@cryptsoft.com).

Mounting

Mounting bracket with junction box holes (double-gang, single-gang, and 4" octagon) and for wall or ceiling mount
1/2" (M20) or 3/4" (M25) conduit side entry, with conduit adapter

Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3
Typical 4.8 W, max 10.8 W

Connectors

Network: Shielded 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

Optimized IR with power-efficient, long-life 850 nm IR LEDs
Range of reach 30 m (98 ft) or more depending on the scene

Storage

Support for microSD/microSDHC/microSDXC card and encryption
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

Without weathershield:
Height: 102 mm (4.0 in)
Ø 149 mm (5.9 in)

Weight

With weathershield:
791 g (1.74 lb)

Included accessories

Installation guide, Windows® decoder 1-user license, drill hole template, RESISTORX® TR20 bit, terminal block connector, cable gaskets, connector guard, weathershield

Optional accessories

AXIS TP3823-E Weathershield Black
AXIS TP3821-E Casing Black
AXIS TM3815-E Dome Smoked
AXIS Surveillance Cards
For more accessories, see 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

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: 12% (bio-based)
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