

AXIS P3255-LVE Dome Camera

Streamlined fixed dome for analytics with deep learning

This outdoor-ready, vandal-resistant fixed dome features a deep-learning processing unit that provides the perfect platform for developing customized analytics based on deep learning. By running analytics directly on the camera (on the edge), there's no need for expensive servers resulting in a faster and more scalable system. AXIS P3255-LVE offers excellent video quality in HDTV 1080p and includes OptimizedIR illumination and Forensic WDR for sharp video even in challenging light or complete darkness. It features AXIS Object Analytics for nuanced and remarkably granular object classification. Furthermore, it's packed with enhanced security functionality to prevent unauthorized access and safeguard your system.

- > **Powerful AI with deep learning**
- > **Granular object classification**
- > **Support for 3rd-party AI applications**
- > **Edge-based processing for scalability**
- > **Lightfinder 2.0, Forensic WDR, OptimizedIR**



AXIS P3255-LVE Dome Camera

Camera

Image sensor

1/2.8" progressive scan RGB CMOS

Lens

Varifocal, 3.4–8.9 mm, F1.8
Horizontal field of view: 100°–36°
Vertical field of view: 53°–20°
Remote zoom and focus, P-Iris control, IR corrected

Day and night

Automatically removable infrared-cut filter

Minimum illumination

With Forensic WDR and Lightfinder 2.0:
Color: 0.1 lux at 50 IRE, F1.8
B/W: 0.02 lux at 50 IRE, F1.8; 0 lux with IR illumination on

Shutter speed

1/66500 s to 2 s

Camera adjustment

Pan $\pm 180^\circ$, tilt $\pm 75^\circ$, rotation $\pm 175^\circ$

System on chip (SoC)

Model

ARTPEC-7

Memory

2048 MB RAM, 1024 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

1920x1080 to 160x90

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 for 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 2 individually cropped out view areas in full frame rate

Image settings

Compression, color saturation, brightness, sharpness, contrast, local contrast, white balance, day/night threshold, tone mapping, exposure control (including automatic gain control), exposure zones, defogging, Forensic WDR: up to 120 dB depending on scene, barrel distortion correction, fine tuning of low-light behavior, dynamic text and image overlay, privacy masks, mirroring, rotation: 0°, 90°, 180°, 270°, including Corridor Format

Pan/Tilt/Zoom

Digital PTZ, preset positions

Audio

Audio streaming

Full duplex

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, line output, automatic gain control
Two-way audio connectivity via AXIS T61 Audio and I/O
Interfaces with portcast technology (no support for AXIS T61 Mk II)

Network

Security

IP address filtering, HTTPS¹ encryption, IEEE 802.1X (EAP-TLS)¹ network access control, user access log, centralized certificate management, signed video, Axis Edge Vault, Axis device ID

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, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SSH, SIP, LLDP, CDP, MQTT, 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

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.

Event conditions

Analytics, external input, supervision of input, edge storage events, virtual inputs through API
MQTT subscribe

Event actions

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
MQTT publish
Overlay text, external output activation, play audio clip, make call

Built-in installation aids

Pixel counter, remote focus, remote zoom

OptimizedIR with adjustable IR illumination intensity

Analytics

Applications

Included

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

Supported

AXIS Perimeter Defender, AXIS License Plate Verifier
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, other)

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

Up to 10 scenarios

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

Polygon include/exclude areas

Perspective configuration

ONVIF Motion Alarm event

AXIS Scene Metadata

Object classes: Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates

Confidence, position

Approvals

EMC

EN 55032 Class A, EN 50121-4, EN 55024,

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

IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IS 13252, IEC/EN 62471

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).

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

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+), secure keystore, secure
boot

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](https://axis.com/support/cybersecurity/resources)

To read more about Axis cybersecurity support, go to
axis.com/cybersecurity

General

Casing

IP66- and NEMA 4X-rated, IK10 impact-resistant
polycarbonate casing with hard-coated dome and
dehumidifying membrane

Encapsulated electronics and captive screws

Color: white NCS S 1002-B

For repainting instructions and impact on warranty,
contact your Axis partner.

Mounting

Mounting bracket with holes for junction box (double-
gang, single-gang, and 4" octagon) and for wall or
ceiling mount

1/4"-20 UNC tripod screw thread

Sustainability

PVC free

Power

Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4
Typical 7.8 W, max 14.6 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: 4-pin 2.5 mm (0.098 in) terminal block for audio
in and out

Audio and I/O connectivity via AXIS T61 Audio and I/O
Interfaces with portcast technology (no support for
AXIS T61 Mk II)

IR illumination

Optimized IR 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 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 (intermittent): 55 °C (131 °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: 104 mm (4.09 in)

ø 149 mm (5.87 in)

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 (eay@cryptsoft.com).

Weight

With weathershield:
800 g (1.8 lb)

Included accessories

Installation guide, Windows® decoder 1-user license, drill template, Resistorx® T20 L-key, terminal block connectors, cable gaskets, connector guard, weathershield

Optional accessories

AXIS T94M02L Recessed Mount, AXIS T94T01D Pendant Kit, AXIS Dome Intrusion Switch C, AXIS T6101 Audio and I/O Interface, AXIS T6112 Audio and I/O Interface, AXIS ACI Conduit Adapters, Axis mounts and microphones, smoked dome, black casing
For more accessories, see axis.com

Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

Warranty

5-year warranty, see axis.com/warranty