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 angle adjustment	Pan ±180°, tilt ±75°, rotation ±175°

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 optional AXIS T61 Audio and I/O Interfaces with portcast technology

Network

Security	IP address filtering, HTTPS[a] encryption, IEEE 802.1X (EAP-TLS)[a] 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, 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, 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*. ACAP includes Native SDK and Computer Vision SDK.

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

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

AXIS Object Analytics	**Object classes:** humans, vehicles (types: cars, buses, trucks, bikes) **Features:** line crossing, object in area, crossline counting[BETA], time in area[BETA] Up to 10 scenarios Metadata visualized with trajectories, color-coded bounding boxes and tables 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*.

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+), secure keystore, secure boot
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* 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- 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 ¼"-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
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 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)
Approvals	EMC EN 55032 Class A, EN 50121-4, IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), VCCI Class A, RCM AS/NZS CISPR 32 Class A, KC KN32 Class A, KC KN35 Safety IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IS 13252, IEC/EN 62471 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
Dimensions	Without weathershield: Height: 104 mm (4.09 in) ø 149 mm (5.87 in)
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*
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, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Warranty	5–year warranty, see *axis.com/warranty*

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).*

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