AXIS P3248-LVE Network Camera
Streamlined 4K outdoor-ready dome for any light

AXIS P3248-LVE offers excellent image quality in brilliant 4K resolution. This IK10-rated outdoor-ready camera features Axis Lightfinder 2.0 and Axis Forensic WDR for true colors and great detail in challenging light or near darkness. It includes OptimizedIR for surveillance in complete darkness and motion-adaptive exposure significantly reduces motion blur from approaching or nearby objects. AXIS Object Analytics lets you detect and classify humans and vehicles. And, thanks to two-way audio and I/O connectivity, you can add audio analytics and integrate peripheral equipment. Furthermore, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis products on your network.

> **4K resolution at 30 fps**

> **Lightfinder 2.0 and Motion-adaptive exposure**

> **Zipstream supporting H.264 and H.265**

> **AXIS Object Analytics**

> **Enhanced security features**

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Camera

Image sensor	1/1.8" progressive scan RGB CMOS
Lens	Varifocal, 4.3–8.6 mm, F1.5 Horizontal field of view: 100°–53° Vertical field of view: 54°–30° 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:** 0.14 lux at 50 IRE, F1.5 **B/W:** 0 lux at 50 IRE, F1.5
Shutter speed	1/8500 s to 1/5 s
Camera angle adjustment	Pan ±180°, tilt ±75°, rotation ±175°

System on chip (SoC)

Model	ARTPEC-7
Memory	2048 MB RAM, 512 MB Flash
Compute capabilities	Machine learning processing unit (MLPU)

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	3840x2160 to 160x90
Frame rate	25/30 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), motion-adaptive exposure, 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 features	Automatic gain control Voice enhancer
Audio streaming	Configurable duplex: Two-way (half duplex, full duplex)
Audio input/output	Two-way audio connectivity through optional AXIS T61 Audio and I/O Interfaces with portcast technology
Audio input	Input for external unbalanced microphone, optional 5 V microphone power Digital input, optional 12 V ring power Unbalanced line input
Audio output	Line output
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

Network

Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS, TLS, 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 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
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 Object Analytics, AXIS Scene Metadata AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, active tampering alarm Audio detection **Supported** AXIS Perimeter Defender Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*
AXIS Object Analytics	**Object classes:** humans, vehicles **Scenarios:** line crossing, object in area, crossline counting, 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 Scene Metadata	**Object classes:** humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Confidence, position

Approvals

EMC	EN 55035, EN 55032 Class A, EN 50121-4, 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 **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
Environment	IEC 60068-2-1, IEC 60068-2-14, IEC 60068-2-2, IEC 60068-2-27, IEC 60068-2-6, IEC 60068-2-78 IEC/EN 60529 IP66, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS2 (2.2.7-2.2.9)
Network	NIST SP500-267

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:** Secure boot, Axis Edge Vault with Axis device ID
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, 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- 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 802.3af/802.3at Type 1 Class 3 Typical 8.6 W, max 11.8 W
Connectors	RJ45 10BASE-T/100BASE-TX/1000BASE-T 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 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	-40 °C to 50 °C (-40 °F to 122 °F) Maximum temperature (intermittent): 55 °C (131 °F) Absolute maximum temperature: 74 °C (165 °F) according to NEMA TS2 2016, 2.2.7 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)
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 T94M01D Pendant Kit, AXIS Dome Intrusion Switch C, AXIS TP3804-E Metal Casing White, 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*

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