

# AXIS P3248-LV Network Camera

Streamlined 4K dome for any light

AXIS P3248-LV offers excellent image quality in brilliant 4K resolution. This IK10-rated camera features Axis Lightfinder 2.0 and Axis Forensic WDR to deliver 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](#)



# AXIS P3248-LV Network Camera

<b>Camera</b>		
<b>Image sensor</b>	1/1.8" progressive scan RGB CMOS	
<b>Lens</b>	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	
<b>Day and night</b>	Automatically removable infrared-cut filter	
<b>Minimum illumination</b>	<b>With Forensic WDR and Lightfinder 2.0:</b> Color: 0.14 lux at 50 IRE, F1.5 B/W: 0 lux at 50 IRE, F1.5	
<b>Shutter speed</b>	1/8500 s to 1/5 s	
<b>Camera angle adjustment</b>	Pan ±180°, tilt ±75°, rotation ±175°	
<b>System on chip (SoC)</b>		
<b>Model</b>	ARTPEC-7	
<b>Memory</b>	2048 MB RAM, 512 MB Flash	
<b>Compute capabilities</b>	Machine learning processing unit (MLPU)	
<b>Video</b>		
<b>Video compression</b>	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main Profile Motion JPEG	
<b>Resolution</b>	3840x2160 to 160x90	
<b>Frame rate</b>	25/30 fps with power line frequency 50/60 Hz	
<b>Video streaming</b>	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	
<b>Multi-view streaming</b>	Up to 2 individually cropped out view areas in full frame rate	
<b>Image settings</b>	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	
<b>Pan/Tilt/Zoom</b>	Digital PTZ, preset positions	
<b>Audio</b>		
<b>Audio streaming</b>	Full duplex	
<b>Audio encoding</b>	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	
<b>Audio input/output</b>	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	
<b>Network</b>		
<b>Security</b>	Password protection, IP address filtering, HTTPS <sup>a</sup> encryption, IEEE 802.1X (EAP-TLS) <sup>a</sup> network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot, signed video, Axis Edge Vault, Axis device ID	
<b>Network protocols</b>	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS <sup>a</sup> , TLS <sup>a</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP <sup>b</sup> , SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SSH, SIP, LLDP, CDP, MQTT v3.1.1, Syslog, Link-Local address (ZeroConf)	
<b>System integration</b>		
<b>Application Programming Interface</b>	Open API for software integration, including VAPIX <sup>®</sup> and AXIS Camera Application Platform; specifications at <a href="http://axis.com">axis.com</a> One-click cloud connection ONVIF <sup>®</sup> Profile G, ONVIF <sup>®</sup> Profile M, ONVIF <sup>®</sup> Profile S, and ONVIF <sup>®</sup> Profile T, specification at <a href="http://onvif.org">onvif.org</a>	
		Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX
<b>Event conditions</b>	Analytics, external input, supervision of input, edge storage events, virtual inputs through API MQTT subscribe	
<b>Event actions</b>	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	
<b>Built-in installation aids</b>	Pixel counter, remote focus, remote zoom OptimizedIR with adjustable IR illumination intensity	
<b>Analytics</b>		
<b>AXIS Object Analytics</b>	Object classes: humans, vehicles Trigger conditions: line crossing, object in area, time in area <sup>BETA</sup> Up to 10 scenarios Metadata visualized with trajectories and color-coded bounding boxes Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event	
<b>Metadata</b>	<b>Object data:</b> Classes: humans, faces, vehicles, license plates Confidence, position <b>Event data:</b> Producer reference, scenarios, trigger conditions	
<b>Applications</b>	<b>Included</b> AXIS Object Analytics AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, active tampering alarm Audio detection <b>Supported</b> AXIS Live Privacy Shield Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="http://axis.com/acap">axis.com/acap</a>	
<b>General</b>		
<b>Casing</b>	IP52-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.	
<b>Mounting</b>	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	
<b>Sustainability</b>	PVC free	
<b>Power</b>	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 8.2 W, max 11.4 W	
<b>Connectors</b>	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	
<b>IR illumination</b>	OptimizedIR with power-efficient, long-life 850 nm IR LEDs Range of reach 40 m (130 ft) or more depending on the scene	
<b>Storage</b>	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 <a href="http://axis.com">axis.com</a>	
<b>Operating conditions</b>	0 °C to 50 °C (32 °F to 122 °F) Humidity 10–85% RH (non-condensing)	
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)	

<b>Approvals</b>	<p><b>EMC</b> EN 55032 Class A, EN 55035, EN 61000-3-2, EN 61000-3-3, 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</p> <p><b>Safety</b> IEC/EN/UL 62368-1, IS 13252, IEC/EN 62471</p> <p><b>Environment</b> IEC 60068-2-1, IEC 60068-2-14, IEC 60068-2-2, IEC 60068-2-27, IEC 60068-2-6, IEC 60068-2-78</p> <p><b>Network</b> NIST SP500-267</p>	<b>Optional accessories</b>	<p>AXIS TP3201 Recessed Mount, optionally with AXIS Device Microphone B, AXIS T94K01D Pendant Kit, AXIS Dome Intrusion Switch C, AXIS T6101 Audio and I/O Interface, AXIS T6112 Audio and I/O Interface, AXIS TP3901 Microphone Kit, AXIS ACI Conduit Adapters, Axis mounts and microphones, smoked dome, black casing For more accessories, see <a href="http://axis.com">axis.com</a></p>
<b>Dimensions</b>	<p>Height: 103 mm (4.06 in) ø 149 mm (5.87 in)</p>	<b>Video management software</b>	<p>AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at <a href="http://axis.com/vms">axis.com/vms</a></p>
<b>Weight</b>	<p>720 g (1.6 lb)</p>	<b>Languages</b>	<p>English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese</p>
<b>Included accessories</b>	<p>Installation guide, Windows® decoder 1-user license, drill template, Resistorx® T20 L-key, terminal block connectors, cable gaskets, connector guard</p>	<b>Warranty</b>	<p>5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a></p>
		<p>a. <i>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).</i></p>	
		<p>Environmental responsibility:</p>	<p><a href="http://axis.com/environmental-responsibility">axis.com/environmental-responsibility</a></p>