# AXIS P3245-VE Network Camera
## Streamlined outdoor-ready HDTV 1080p fixed dome

AXIS P3245-VE offers excellent image quality in HDTV 1080p under any light conditions. This outdoor-ready, IK10-rated camera features Forensic WDR to provide clarity when there's both dark and light areas in the scene. And, Lightfinder 2.0 delivers images with more life-like colors and sharp images of moving objects. Including a varifocal lens with remote zoom and focus capabilities, it eliminates the need for hands-on fine tuning. This camera features enhanced security functionality to ensure the integrity and authenticity of the camera's firmware. Furthermore, it offers Axis Zipstream with support for H.264/H.265, which significantly reduces bandwidth and storage requirements.

> **HDTV 1080p video quality**

> **Remote focus and zoom**

> **Lightfinder 2.0 and Forensic WDR**

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

> **Signed firmware and secure boot**

# AXIS P3245-VE Network Camera

## Camera

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| **Image sensor** | 1/2.8" progressive scan RGB CMOS |
| **Lens** | Varifocal, 3.4–8.9 mm, F1.8<br>Horizontal field of view: 100°-36°<br>Vertical field of view: 53°-20°<br>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:**<br>**Color:** 0.1 lux at 50 IRE, F1.8<br>**B/W:** 0.02 lux at 50 IRE, F1.8 |
| **Shutter speed** | 1/66500 s to 2 s |
| **Camera angle adjustment** | Pan ±180°, tilt ±75°, rotation ±175° |

## System on chip (SoC)

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| **Model** | ARTPEC-7 |
| **Memory** | 1024 MB RAM, 512 MB Flash |
| **Compute capabilities** | Machine learning processing unit (MLPU) |

## Video

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| **Video compression** | H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles<br>H.265 (MPEG-H Part 2/HEVC) Main Profile<br>Motion JPEG |
| **Resolution** | 1920x1080 to 160x90 |
| **Frame rate** | **With WDR:** 25/30 fps with power line frequency 50/60 Hz<br>**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<br>Axis Zipstream technology for H.264 and H.265<br>Controllable frame rate and bandwidth<br>VBR/ABR/MBR H.264/H.265<br>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

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| **Audio input/output** | Two-way audio connectivity via optional AXIS T61 Audio and I/O Interfaces with portcast technology |

## Network

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| **Security** | IP address filtering, HTTPS[a] encryption, IEEE 802.1X (EAP-TLS)[a] network access control, user access log, centralized certificate management |
| **Network protocols** | IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS[a], 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, IGMPv1/v2/v3, 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

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| **Application Programming Interface** | Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com*<br>One-click cloud connection<br>ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at *onvif.org*<br>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, edge storage events, virtual inputs through API<br>MQTT subscribe |

## Event actions

Record video: SD card and network share<br>Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share, and email<br>Pre- and post-alarm video or image buffering for recording or upload<br>Notification: email, HTTP, HTTPS, TCP, and SNMP trap<br>MQTT publish<br>Overlay text, make call

## Built-in installation aids

Pixel counter, remote focus, remote zoom

## Analytics

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| **AXIS Object Analytics** | **Object classes**: humans, vehicles<br>**Trigger conditions**: line crossing, object in area<br>Up to 10 scenarios<br>Metadata visualized with color-coded bounding boxes<br>Polygon include/exclude areas<br>Perspective configuration<br>ONVIF Motion Alarm event |
| **Metadata** | **Object data**: Classes: humans, faces, vehicles, license plates<br>Confidence, position<br>**Event data**: Producer reference, scenarios, trigger conditions |
| **Applications** | **Included**<br>AXIS Object Analytics<br>AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard<br>AXIS Video Motion Detection, active tampering alarm<br>**Supported**<br>Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap* |

## Cybersecurity

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| **Edge security** | **Software:** Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption<br>**Hardware:** Secure boot |
| **Network security** | IEEE 802.1X (EAP-TLS)[a], 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*<br>*Axis Vulnerability Management Policy*<br>*Axis Security Development Model*<br>AXIS OS Software Bill of Material (SBOM)<br>To download documents, go to *axis.com/support/cybersecurity/resources*<br>To read more about Axis cybersecurity support, go to *axis.com/cybersecurity* |

## General

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| **Casing** | IP66- and NEMA 4X-rated, IK10 impact-resistant polycarbonate casing with hard-coated dome and dehumidifying membrane<br>Encapsulated electronics and captive screws<br>Color: white NCS S 1002-B<br>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<br>¼"-20 UNC tripod screw thread |
| **Sustainability** | PVC free |
| **Power** | Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3<br>Typical 3.5 W, max 8 W |
| **Connectors** | RJ45 10BASE-T/100BASE-TX PoE<br>Audio and I/O connectivity via AXIS T61 Audio and I/O Interfaces with portcast technology |
| **Storage** | Support for microSD/microSDHC/microSDXC card<br>Support for SD card encryption (AES-XTS-Plain64 256bit)<br>Recording to network-attached storage (NAS)<br>For SD card and NAS recommendations see *axis.com* |
| **Operating conditions** | -40 °C to 50 °C (-40 °F to 122 °F)<br>Maximum temperature (intermittent): 55 °C (131 °F)<br>Absolute maximum temperature: 74 °C (165 °F) according to NEMA TS2 2016, 2.2.7<br>Start-up temperature: -30 °C to 50 °C (-22 °F to 122 °F)<br>Humidity 10–100% RH (condensing) |

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| **Storage conditions** | −40 °C to 65 °C (−40 °F to 149 °F)<br>Humidity 5–95% RH (non-condensing) | **Included accessories** | Installation guide, Windows® decoder 1-user license, drill template, Resistorx® T20 L-key, cable gaskets, connector guard Weathershield |
| **Approvals** | **EMC**<br>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<br>**Safety**<br>IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IS 13252<br>**Environment**<br>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)<br>**Network**<br>NIST SP500-267 | **Optional accessories** | AXIS T94M02L Recessed Mount, AXIS T94T01D Pendant Kit, AXIS T6101 Audio and I/O Interface, AXIS T6112 Audio and I/O Interface, AXIS ACI Conduit Adapters, Axis mounts, smoked dome, black casing<br>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* |
| **Dimensions** | **Without weathershield:**<br>Height: 104 mm (4.09 in)<br>ø 149 mm (5.87 in) | **Languages** | English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese |
| **Weight** | **With weathershield:**<br>800 g (1.8 lb) | **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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