AXIS P4705-PLVE Panoramic Camera

Dual-sensor with 360° IR and deep learning

This dual-sensor, multidirectional camera offers 2*2 MP at 30 fps. It features Lightfinder and Forensic WDR for sharp, clear images in challenging or poor light conditions. Built on ARTPEC-8, this high-performance camera includes a deep learning processing unit enabling improved processing and storage capabilities. It also allows you to collect and analyze even more data than before – on the edge. Plus, it delivers valuable metadata facilitating fast, easy, and efficient forensic search capabilities in live or recorded video. And, with flexible positioning of both varifocal camera heads plus, remote zoom and focus capabilities, it ensures fast and cost-effective installation.

- > 2*2 MP, multidirectional camera, with one IP address
- > Support for analytics with deep learning on both sensors
- > 360° IR illumination
- > 2.5x zoom
- > Axis Lightfinder and Forensic WDR

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Camera

Image sensor	2 x 1/2.8" progressive scan RGB CMOS
Lens	Varifocal, 3.3–8.1 mm, F1.9–3.2 Horizontal field of view: 107°–39° Vertical field of view: 55°–22° Diagonal field of view: 131°–45° Minimum focus distance: 0.5 m (1.6 ft) Fixed iris, IR corrected, remote zoom and focus
Day and night	Automatically removable infrared-cut filter
Minimum illumination	**Color:** 0.15 lux at 50 IRE, F1.9 **B/W:** 0 lux at 50 IRE, F1.9 0 lux with IR illumination on
Shutter speed	1/20000 s to 1.5 s with 60/50 Hz
Camera angle adjustment	Pan ±110°, tilt ±75°, rotation ±170°

System on chip (SoC)

Model	ARTPEC-8
Memory	2048 MB RAM, 8192 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	2x 1920x1080 (2x HDTV 1080p) to 2x 640x360
Frame rate	Up to 60/50 fps (60/50 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264, H.265, and Motion JPEG Axis Zipstream technology in H.264 and H.265 Controllable frame rate and bandwidth VBR/ABR/MBR H.264/H.265 Low latency mode
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR, white balance, day/night threshold, tone mapping, exposure mode, exposure zones, compression, rotation: 0°, 90°, 180°, 270° including Corridor Format, mirroring, dynamic text and image overlay, polygon privacy mask

Audio

Audio streaming	Audio in, simplex Two-way audio via edge-to-edge technology
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 or line input, ring power, digital audio input, automatic gain control Network speaker pairing

Network

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, 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, RTCP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Syslog, 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*
Onscreen controls	IR illumination Autofocus Privacy mask Play media clip
Event conditions	Analytics, virtual inputs through API Audio: audio detection Device status: above operating temperature, above or below operating temperature, below operating temperature, within operating temperature, IP address removed, new IP address, network lost, system ready, ring power overcurrent protection, live stream active, casing open Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal okay Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: manual trigger, virtual input MQTT: subscribe Scheduled and recurring: schedule Video: average bitrate degradation, day-night mode, live stream open, tampering
Event actions	Overlay text, day/night mode, flash status LED Audio clips: play, stop Illumination: use lights, use lights while the rule is active MQTT: publish Notification: HTTP, HTTPS, TCP and email Pre- and post-alarm video or image buffering for recording or upload Record video: SD card and network share SNMP traps: send, send while the rule is active Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email
Built-in installation aids	Pixel counter, remote zoom and focus, level grid

Analytics

AXIS Object Analytics	**Object classes**: humans, vehicles (types: cars, buses, trucks, bikes) **Trigger conditions**: line crossing, object in area, time in area[BETA] Up to 10 scenarios Metadata visualized with trajectories and color-coded bounding boxes 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:** Secure boot, Axis Edge Vault with Axis device ID, signed video, secure keystore (CC EAL4+, FIPS 140-2 level 2 certified hardware protection of cryptographic operations and keys)
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* 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-, IP67-, NEMA 4X- and IK10-rated Polycarbonate hard-coated dome Aluminum and plastic casing, weathershield Color: white NCS S 1002-B or black NCS S 9000-N
Mounting	Mounting bracket with junction box holes (double-gang, single-gang, 4" square, and 4" octagon) ¼"-20 UNC tripod screw thread

	½" (M20) conduit side entry
Sustainability	PVC and BFR/CFR free, 7% recycled plastics, 2% bioplastics
Power	Power over Ethernet (PoE) IEEE802.3at Type 2 Class 3 Typical 6.2 W, max 12.95 W Power over Ethernet (PoE) IEEE802.3at Type 2 Class 4 Typical 8.3 W, max 17.5 W
Connectors	Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE 3.5 mm mic/line in
IR illumination	OptimizedIR with power-efficient, long-life 850 nm IR LEDs PoE Class 3: range of reach 15 m (50 ft) or more depending on the scene PoE Class 4: range of reach 30 m (98 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	-30 °C to 50 °C (-22 °F to 122 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Start-up temperature: -30 °C Humidity 10–100% RH (non-condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
Approvals	**EMC** CISPR 32 Class A, CISPR 35, EN 50121-4, EN 55032 Class A, EN 55035, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), IEC 62236-4, KS C 9832 Class A, KS C 9835, RCM AS/NZS CISPR 32 Class A, VCCI Class A **Safety** CAN/CSA-C22.2 No. 60950-22, CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IEC/EN 62471, IS 13252 **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 62262:2002 IK10, IEC/EN 60529 IP66/IP67, MIL-STD-810H (Method 501.7, 502.7, 505.7, 506.6, 507.6, 509.7, 512.6)[b], NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9), VDMA 24364 **Network** NIST SP500-267
Dimensions	Height: 88 mm (3.5 in) Width: 133 mm (5.2 in) Length: 208 mm (8.2 in)
Weight	975 g (2.1 lb)
Included accessories	Installation guide, Windows® decoder 1-user license, connector kit, weathershield, connector guard
Optional accessories	Black casing, smoked dome, conduit adapters, AXIS T94N02 Pendant Kit AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards 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, Polish, Traditional Chinese
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).*
b. *Method 505.7 with weathershield*

Environmental responsibility:

axis.com/environmental-responsibility