

# 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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<b>Camera</b>	
<b>Image sensor</b>	2 x 1/2.8" progressive scan RGB CMOS
<b>Lens</b>	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
<b>Day and night</b>	Automatically removable infrared-cut filter
<b>Minimum illumination</b>	Color: 0.15 lux at 50 IRE, F1.9 B/W: 0 lux at 50 IRE, F1.9 0 lux with IR illumination on
<b>Shutter speed</b>	1/20000 s to 1.5 s with 60/50 Hz
<b>Camera angle adjustment</b>	Pan ±110°, tilt ±75°, rotation ±170°
<b>System on chip (SoC)</b>	
<b>Model</b>	ARTPEC-8
<b>Memory</b>	2048 MB RAM, 8192 MB Flash
<b>Compute capabilities</b>	Deep learning processing unit (DLPU)
<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>	2x 1920x1080 (2x HDTV 1080p) to 2x 640x360
<b>Frame rate</b>	Up to 60/50 fps (60/50 Hz) in all resolutions
<b>Video streaming</b>	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
<b>Image settings</b>	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
<b>Audio</b>	
<b>Audio streaming</b>	Audio in, simplex Two-way audio via edge-to-edge technology
<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 or line input, ring power, digital audio input, automatic gain control Network speaker pairing
<b>Network</b>	
<b>Security</b>	IP address filtering, HTTPS <sup>a</sup> encryption, IEEE 802.1x (EAP-TLS) <sup>a</sup> network access control, user access log, centralized certificate management
<b>Network protocols</b>	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS <sup>a</sup> , HTTP/2, TLS <sup>a</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP <sup>®</sup> , 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, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), 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="https://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="https://onvif.org">onvif.org</a>
<b>Onscreen controls</b>	IR illumination Autofocus Privacy mask Play media clip
<b>Event conditions</b>	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
<b>Event actions</b>	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
<b>Built-in installation aids</b>	Pixel counter, remote zoom and focus, level grid
<b>Analytics</b>	
<b>AXIS Object Analytics</b>	Object classes: humans, vehicles (types: cars, buses, trucks, bikes) 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>	Object data: Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Confidence, position Event data: Producer reference, scenarios, trigger conditions
<b>Applications</b>	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 <a href="https://axis.com/acap">axis.com/acap</a>
<b>Cybersecurity</b>	
<b>Edge security</b>	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)
<b>Network security</b>	IEEE 802.1X (EAP-TLS) <sup>a</sup> , IEEE 802.1AR, HTTPS/HSTS <sup>a</sup> , TLS v1.2/v1.3 <sup>a</sup> , Network Time Security (NTS), X.509 Certificate PKI, IP address filtering
<b>Documentation</b>	<i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> AXIS OS Software Bill of Material (SBOM) To download documents, go to <a href="https://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a> To read more about Axis cybersecurity support, go to <a href="https://axis.com/cybersecurity">axis.com/cybersecurity</a>
<b>General</b>	
<b>Casing</b>	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
<b>Mounting</b>	Mounting bracket with junction box holes (double-gang, single-gang, 4" square, and 4" octagon)

	1/4"-20 UNC tripod screw thread 1/2" (M20) conduit side entry
<b>Sustainability</b>	PVC and BFR/CFR free, 7% recycled plastics, 2% bioplastics
<b>Power</b>	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
<b>Connectors</b>	Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE 3.5 mm mic/line in
<b>IR illumination</b>	Optimized IR 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
<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>	-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)
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
<b>Approvals</b>	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
<b>Environment</b>	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) <sup>b</sup> , NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9), VDMA 24364
<b>Network</b>	NIST SP500-267

<b>Dimensions</b>	Height: 88 mm (3.5 in) Width: 133 mm (5.2 in) Length: 208 mm (8.2 in)
<b>Weight</b>	975 g (2.1 lb)
<b>Included accessories</b>	Installation guide, Windows® decoder 1-user license, connector kit, weathershield, connector guard
<b>Optional accessories</b>	Black casing, smoked dome, conduit adapters, AXIS T94N02 Pendant Kit AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards For more accessories, see <a href="http://axis.com">axis.com</a>
<b>Video management software</b>	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>
<b>Languages</b>	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese
<b>Warranty</b>	5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>

- a. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](http://openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).
- b. Method 505.7 with weathershield