AXIS Q3819-PVE Panoramic Camera

Panoramic camera for seamless, 180° coverage

AXIS Q3819-PVE delivers a 180º panoramic overview of extensive areas. With 14 MP resolution and seamless stitching of all four images, it offers 180° horizontal and 38° vertical coverage. It's possible to mount two cameras back-to-back for a complete 360° overview using AXIS T94V01C Dual Camera Mount. It features AXIS Object Analytics for nuanced and remarkably granular object classification. Furthermore, it includes built-in motors allowing for remote pan/tilt/roll functionality and it offers smart pairing with Axis network speakers using edge-to-edge technology. Furthermore, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis devices on your network.

- > 14 MP multisensor with seamless stitching
- > 180° horizontal, 38° vertical coverage
- > AXIS Object Analytics
- > AXIS Edge Vault, TPM module and Lightfinder
- > Built-in motors for remote pan/tilt/roll

AXIS Q3819-PVE Panoramic Camera

Camera	
Image sensor	4 x 5 MP 1/2.5" progressive scan RGB CMOS
Lens	Fixed 5.9 mm, F1.88 Horizontal field of view: 180° Vertical field of view: 38°
Day and night	Automatically removable infrared-cut filter
Minimum illumination	With Forensic WDR and Lightfinder: **Color:** 0.16 lux, F2.0 **B/W:** 0.06 lux, F2.0
Shutter speed	1/40000 to 1/25 s
Camera adjustment	Pan ± 135° Tilt 15° to 92° Roll ± 8°
System on chip (SoC)	
Model	ARTPEC-7 (x2)
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	8192x1728 (14.2 MP) to 608x128
Frame rate	14.2 MP @ 25/30 fps (50/60 Hz) WDR
Video streaming	One configurable stream in H.264, H.265 and Motion JPEG in full frame rate Multiple individually configurable streams in reduced frame rate Controllable frame rate and bandwidth VBR/ABR/MBR H.264/H.265 Low latency mode
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: up to 120 dB depending on scene, white balance, day/night threshold, exposure mode, compression, dynamic text and image overlay, orientation aid, exposure control, noise reduction, fine tuning of behavior at low light, polygon privacy masks
Audio	
Audio streaming	Two-way audio via edge-to-edge technology
Audio input/output	External microphone input, ring-power, digital audio input, automatic gain control, network speaker pairing
Audio encoding	24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz, 44.1 kHz ACC-LC, LPCM Configurable bit rate
Network	
Security	IP address filtering, HTTPS[a] encryption, IEEE 802.1X (EAP-TLS)[b] network access control, user access log, centralized certificate management, signed video, secure keystore (CC EAL4 certified), TPM (FIPS 140-2 certified)
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS[c], TLS[d], 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, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)
System integration	
Application Programming Interface	Open API for software integration ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specification at *onvif.org*
Event conditions	Analytics, external input, supervised external input, edge storage events, virtual inputs through API Audio: audio detection Digital audio: digital signal contains Axis metadata, digital signal as invalid sample rate, digital signal missing, digital signal ok Device status: above operating temperature, above or below operating temperature, below operating temperature, fan failure, IP address removed, network lost, new IP address, shock detected, storage failure, system ready, within operating temperature, casing open, ring power overcurrent protection Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: digital input, manual trigger, virtual input MQTT subscribe Scheduled and recurring: scheduled event Video: live stream open, average bitrate degradation, day-night mode, tampering
Event actions	Day/night mode, overlay text, video recording to edge storage, pre- and post-alarm video buffering, send SNMP trap, play audio clipm I/O events, status LED events File upload: FTP, SFTP, HTTP, HTTPS network share, email MQTT publish Notification: email, HTTP, HTTPS TCP
Built-in installation aids	Remote Pan/tilt/roll: designed to withstand at least 200 full cycles, autoroll, pixel counter, leveling guide
Analytics	
Applications	**Included** AXIS Object Analytics AXIS Video Motion Detection, AXIS Scene Metadata, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, active tampering alarm, audio detection **Supported** 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 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 **Object attributes:** confidence, position
Approvals	
EMC	EAC, EN 55032 Class A, EN 55035, EN 50121-4, EN 55024, EN 61000-6-1, EN 61000-6-2, CISPR 24, CISPR 35 **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 60950-22, IEC/EN/UL 62368-1, CAN/CSA C22.2 No. 62368-1, CAN/CSA-C22.2 No. 60950-22, 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 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9), MIL-STD-810H (Method 501.7, 502.7, 505.7, 506.6, 507.6, 509.7, 512.6)
Network	NIST SP500-267
Cybersecurity	ETSI EN 303 645, BSI IT Security Label, FIPS 140
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:** Axis Edge Vault cybersecurity platform TPM 2.0 (CC EAL4+, FIPS 140-2 Level 2), secure element (CC EAL 6+), Axis device ID, secure boot
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)[e], IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS[f], TLS v1.2/v1.3[g], 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-/IP67- and NEMA 4X-rated, IK10-rated impact-resistant casing with polycarbonate hard coated clear dome, aluminum base and dehumidifying membrane Color: white NCS S 1002-B Casing open detection For repainting instructions and impact on warranty, contact your distributor partner.
Mounting	Mounting bracket with junction box holes (double-gang, single-gang, 4" square, and 4" octagon) and for wall or ceiling mount ¾" (M25) conduit side entries
Sustainability	PVC free
Power	Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 Typical 12 W, max 22.5 W
Connectors	Shielded RJ45 1000BASE-T Terminal block for two configurable supervised inputs/digital outputs (12 V DC output, max load 50 mA), 3.5 mm analog/digital mic/line in
Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Support for recording to network-attached storage (NAS)
Operating conditions	-40 °C to 50 °C (-40 °F to 122 °F) Humidity 10–100% RH (condensing) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Start-up temperature: -40 °C
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
Dimensions	Height: 170 mm (6.6 in) ø 195 mm (7.6 in) *With weathershield:* Height: 221 mm (8.7 in) ø 206 mm (8.1 in)
Weight	2.4 kg (4.5 lb)
Mounting height	Recommended: 4 m and up
Included accessories	Installation guide, Windows® decoder 1-user license, weathershield, RESITORX® T20 screw bit, connector guard
Optional accessories	AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards AXIS TQ3102 Pendant Kit AXIS TQ3101-E Pendant Kit AXIS TQ3201-E Recessed Mount[h] For more accessories, see *axis.com*
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*

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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g. *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).*
h. *The camera's tampering alarm doesn't work when mounted in AXIS TQ3201-E Recessed Mount*