

# AXIS P3818-PVE Panoramic Camera

Seamless, 180° coverage with no blind spots

AXIS P3818-PVE delivers a 180° panoramic overview of extensive areas with ultra-high resolution images and incredible details up to 30 fps. With 13 MP resolution and seamless stitching of all three images, it offers 180° horizontal and 90° vertical coverage with no blind spots. Including a variety of mounting options, it's also possible to mount two cameras back-to-back for a complete 360° overview, using AXIS T94V01C Dual Camera Mount. Featuring edge-to-edge technology, it's easy to add support for audio enabling you to listen in to transactions or incidents. Additionally, built-in cybersecurity features prevent unauthorized access and safeguard your system.

- > [13 MP multisensor camera with one IP address](#)
- > [180° horizontal, 90° vertical coverage](#)
- > [Seamlessly stitched images](#)
- > [Support for audio input](#)
- > [Built-in cybersecurity features](#)



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## Camera

Image sensor	3 x 5 MP 1/2.8" progressive scan RGB CMOS
Lens	Fixed 3.2 mm, F2.0 Horizontal field of view: 180° Vertical field of view: 90°
Day and night	Automatically removable infrared-cut filter
Minimum illumination	<b>With Forensic WDR and Light Under:</b> <b>Color:</b> 0.16 lux, F2.0 <b>B/W:</b> 0.05 lux, F2.0
Shutter speed	1/91000 to 1/25 s <b>With WDR:</b> 1/50000 to 1/25 s
Camera angle adjustment	Pan +/- 180° Tilt 0° to 50° Roll +/- 5°

## System on chip (SoC)

Model	ARTPEC-7 (x2)
Memory	2048 MB RAM (x2), 512 MB Flash

## 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	5120x2560 (13.1 MP) to 608x128
Frame rate	13.1 MP @ 25/30 fps (50/60 Hz) WDR
Video streaming	13.1 MP: 1 configurable stream in H.264, H.265 and Motion JPEG in full 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, line input, 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 <sup>a</sup> encryption, IEEE 802.1X (EAP-TLS) <sup>a</sup> network access control, user access log, centralized certificate management, signed video, Axis Edge Vault, Axis device ID, secure keystore (CC EAL4 certified), TPM (FIPS 140-2 certified)
Network protocols	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>®</sup> , 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 <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>
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 clip, I/O events, status LED events File upload: FTP, SFTP, HTTP, HTTPS network share, email MQTT publish Notification: email, HTTP, HTTPS TCP
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Data streaming	Event data
Built-in installation aids	Pixel counter, leveling guide

## Analytics

Applications	<b>Included</b> AXIS Fence Guard, AXIS Motion Guard, AXIS Loitering Guard AXIS Video Motion Detection, active tampering alarm, audio detection <b>Supported</b> Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="http://axis.com/acap">axis.com/acap</a>
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## Cybersecurity

Edge security	<b>Software:</b> Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption <b>Hardware:</b> Secure boot, Axis Edge Vault with Axis device ID
Network security	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
Documentation	<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="http://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a> To read more about Axis cybersecurity support, go to <a href="http://axis.com/cybersecurity">axis.com/cybersecurity</a>

## 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, 20% recycled plastic
Power	Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 Typical 11 W, max 18 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)
Approvals	<b>EMC</b> EAC, EN 55032 Class A, EN 55035, 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, CISPR 24, CISPR 35

**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

Dimensions	Height: 170 mm (6.6 in) Width in diameter: 195 mm (7.6 in) <b>With weathershield:</b> Height 221 mm (8.7 in) Width 206 mm (8.1 in)
Weight	2.2 kg (4.9 lb)

Mounting height	Recommended: 4–15 m
Included accessories	Installation guide, Windows® decoder 1-user license, weathershield, RESITORX® T20 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 <sup>b</sup> AXIS T94V01C Dual Camera Mount For more accessories, see <a href="http://axis.com">axis.com</a>
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese
Warranty	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), and cryptographic software written by Eric Young (eay@cryptsoft.com).*
- b. *The camera's tampering alarm doesn't work when mounted in AXIS TQ3201-E Recessed Mount*