

# 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



# AXIS P3818-PVE Panoramic Camera

## 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

With Forensic WDR and Lightfinder:  
Color: 0.16 lux, F2.0  
B/W: 0.05 lux, F2.0

### Shutter speed

1/91000 to 1/25 s  
With WDR: 1/50000 to 1/25 s

### Camera 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 256x128

### 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

### Streaming

Two-way audio via edge-to-edge technology

### Input/output

External microphone input, line input, digital audio input, automatic gain control, network speaker pairing

### 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

### Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS<sup>(1)</sup>, TLS<sup>(1)</sup>, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, PTP, NTS, RTSP, RTP, SRTP/RTSPS, 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](http://onvif.org)

1. 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 ([eyay@cryptsoft.com](mailto:eyay@cryptsoft.com)).

## Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, and video management software from Axis' partners available at [axis.com/vms](https://axis.com/vms).

### 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

### Data streaming

Event data

### Built-in installation aids

Pixel counter, leveling guide

## Analytics

### Applications

#### Included

AXIS Fence Guard, AXIS Motion Guard, AXIS Loitering Guard

AXIS Video Motion Detection, active tampering alarm, audio detection

#### Supported

Support for AXIS Camera Application Platform enabling installation of third-party applications, see [axis.com/acap](https://axis.com/acap)

## Approvals

### EMC

EAC, CISPR 24, CISPR 35, EN 55024, EN 55035, EN 55032 Class A, EN 50121-4, EN 61000-6-1, EN 61000-6-2

**Australia/New Zealand:** RCM AS/NZS CISPR 32 Class A

**Canada:** ICES-3(A)/NMB-3(A)

**Japan:** VCCI Class A

**Korea:** KC KN35, KC KN32 Class A

**USA:** FCC Part 15 Subpart B Class A

**Railway:** IEC 62236-4

### Safety

CAN/CSA C22.2 No. 62368-1 ed. 3, CAN/CSA C22.2 No. 60950-22, IEC/EN/UL 62368-1, IEC/EN/UL 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 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, Axis Cryptographic Module (FIPS 140-2 level 1), 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)<sup>(2)</sup>, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS<sup>(2)</sup>, TLS v1.2/v1.3<sup>(2)</sup>, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](https://openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

## 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](https://axis.com/support/cybersecurity/resources)

To read more about Axis cybersecurity support, go to [axis.com/cybersecurity](https://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

3/4" (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)

## Dimensions

Height: 170 mm (6.6 in)

Width in diameter: 195 mm (7.6 in)

**With weathershield:**

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>(3)</sup>

AXIS T94V01C Dual Camera Mount

For more accessories, see [axis.com](https://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](https://axis.com/warranty)

3. The camera's tampering alarm doesn't work when mounted in AXIS TQ3201-E Recessed Mount