

## AXIS M5000 PTZ Camera

Situational awareness camera with build-in PTZ

AXIS M5000 PTZ features three 5 MP sensors and one PTZ camera with 10x optical zoom for total situational awareness of indoor areas up to 400 m<sup>2</sup> (4300 ft<sup>2</sup>). With everything displayed on one monitor, you can move from overview to detailed views in a single click. It features autofocus capabilities and day/night functionality. This cost-effective camera offers the benefits of four cameras while installing just one camera. Furthermore, edge storage lets you record directly to an onboard memory card.

- > **3x 5 MP sensors for situational awareness**
- > **Total overview, zoomed-in details**
- > **Covers indoor areas up to 400 m<sup>2</sup> (4300 ft<sup>2</sup>)**
- > **10x optical zoom with HDTV 1080p**
- > **Autofocus**



# AXIS M5000 PTZ Camera

## Camera

### Image sensor

#### PTZ camera:

1/2.8" progressive scan RGB CMOS

#### Overview cameras:

1/2.8" progressive scan RGB CMOS

### Lens

#### PTZ camera:

Varifocal, 4.7–47 mm, F1.6–3.0

Horizontal field of view: 61.8°–6.7°

Vertical field of view: 36.3°–3.8°

Autofocus, auto-iris, P-Iris control

#### Overview cameras:

Focal length 2.39 mm, F2.0

Horizontal field of view: 360°

Vertical field of view: 93°

### Day and night

#### PTZ camera:

Automatically removable infrared-cut filter

### Minimum illumination

#### PTZ camera:

Color: 0.09 lux at 30 IRE F1.6

B/W: 0.01 lux at 30 IRE F1.6

Color: 0.1 lux at 50 IRE F1.6

B/W: 0.01 lux at 50 IRE F1.6

#### Overview cameras:

Color: 0.08 lux at 30 IRE F2.0

B/W: 0.03 lux at 30 IRE F2.0

Color: 0.4 lux at 50 IRE F2.0

B/W: 0.03 lux at 50 IRE F2.0

### Shutter speed

#### PTZ camera:

1/66500 s to 2 s

#### Overview cameras:

1/50000 s to 2 s

### Pan/Tilt/Zoom

#### PTZ camera:

Pan: 360° with autoflip, 1.8°–150°/s

Tilt: 180°, 1.8°–150°/s

10x optical zoom, 12x digital zoom, total 120x zoom

100 preset positions, limited guard tour, control queue, on-screen directional indicator, E-flip, click-in-image

## System on chip (SoC)

### Model

ARTPEC-7

### Memory

2048 MB RAM, 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

#### PTZ camera:

1920x1080 to 320x180

#### Overview cameras:

2592x1944 to 320x180

### Frame rate

#### PTZ camera:

Up to 25/30 fps with power line frequency 50/60 Hz

#### Overview cameras:

Up to 12 fps with power line frequency 50/60 Hz

### 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

Video streaming indicator

Streaming modes: unicast and multicast<sup>1</sup>

### Image settings

Saturation, contrast, brightness, sharpness, WDR – forensic capture, white balance, day/night threshold, tone mapping, exposure mode, exposure zones, compression, text and image overlay, polygon privacy masks, image freeze on PTZ, local contrast, max shutter, max gain, noise/motion priority, aperture lock, exposure level

Scene profiles: indoor, forensic

### Signal-to-noise ratio

>55 dB

1. We recommend that you use multicast when multiple streams per sensor is required.

## Audio

### Audio streaming

Two-way, full duplex

### Audio encoding

24 bit LPCM, AAC-LC 8/16/32/44.1 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, line output, automatic gain control

## Network

### Security

HTTPS<sup>2</sup> encryption, IEEE 802.1x (EAP-TLS) network access control, user access log, centralized certificate management, signed video, Axis Edge Vault, Axis device ID, secure keystore (CC EAL4 certified)

### Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS<sup>2</sup>, HTTP/2, TLS<sup>2</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)

## System integration

### Application Programming Interface

Open API for software integration, including VAPIX<sup>®</sup> and AXIS Camera Application Platform; specifications at [axis.com](https://axis.com)

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 [onvif.org](https://onvif.org)

### Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at [axis.com/vms](https://axis.com/vms).

### Onscreen controls

Focus recall area  
Video streaming indicator  
Privacy masks  
Day/night shift

### Event conditions

Audio: audio clip playing

Device status: above operating temperature, above or below operating temperature, below operating temperature, IP address removed, network lost, new IP address, storage failure, system ready, within operating temperature

Edge storage: recording ongoing, storage disruption, storage health issues detected

I/O: manual trigger, virtual input

MQTT subscribe

PTZ: PTZ malfunctioning, PTZ movement, PTZ preset position reached, PTZ ready

Scheduled and recurring: scheduled event

Video: average bitrate degradation, day-night mode, live stream open

### Event actions

Audio clips: play, play while the rule is active, stop playing

Guard tours: Run while the rule is active, start

MQTT publish

Notification: email, HTTP, HTTPS, TCP and SNMP trap

Record video: SD card and network share

Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email

Day-night mode, overlay text, preset positions, WDR mode

### Data streaming

Event data

### Built-in installation aids

Pixel counter

## Analytics

### Applications

#### Included

AXIS Loitering Guard

AXIS Video Motion Detection, audio detection, shock detection, advanced gatekeeper

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

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)).

## Approvals

### EMC

EN 55032 Class A, EN 55035, EN 61000-6-1, EN 61000-6-2

USA: FCC Part 15 Subpart B Class A

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

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

Korea: KS C 9832 Class A, KS C 9835

### Safety

CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1, 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 IP51

### 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 Secure element (CC EAL 6+), Axis device ID, secure keystore, signed video, secure boot

### Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)<sup>3</sup>, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS<sup>3</sup>, TLS v1.2/v1.3<sup>3</sup>, 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](https://axis.com/support/cybersecurity/resources)

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

## General

### Casing

IP51-rated

Repaintable plastic casing, polycarbonate (PC) dome

### Sustainability

PVC free, BFR/CFR free

### Power

Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4  
Typical 7.4 W, max 13.0 W

20–28 V DC, typical 6.5 W, max 11.9 W

(PoE midspan and power supply not included)

### Connectors

RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE

DC input terminal block

Audio: mic/line in, line out terminal block

### Storage

Support for SD/SDHC/SDXC card

Support for SD card encryption (AES-XTS-Plain64 256bit)

Support for recording to network-attached storage (NAS)

For SD card and NAS recommendations see [axis.com](https://axis.com)

### Operating conditions

0 °C to 40 °C (32 °F to 104 °F)

Humidity 10–85% RH (non-condensing)

### Storage conditions

–40 °C to 65 °C (–40 °F to 149 °F)

Humidity 5–95% RH (non-condensing)

### Dimensions

Height: 138 mm (5.4 in), ø 247 mm (9.7 in)

### Weight

1.95 kg (4.3 lb)

### Included accessories

Installation Guide, Windows® decoder 1-user license, drill hole template, terminal block connectors, connector guard, bayonette screws

### Optional accessories

AXIS TM5601 Conduit Back Box

AXIS TM5801 Black Dome

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

3. 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)).

## Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

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## Warranty

5-year warranty, see [axis.com/warranty](https://axis.com/warranty)