

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 m² (4300 ft²). 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 m² (4300 ft²)**
- > **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 multicast¹

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

HTTPS² 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, HTTPS², HTTP/2, TLS², 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, 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® and AXIS Camera Application Platform; specifications at axis.com

One-click cloud connection

ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at 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.

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

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (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)³, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS³, TLS v1.2/v1.3³, 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

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

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

3. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (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

Warranty

5-year warranty, see axis.com/warranty