

## AXIS M5000-G PTZ Camera

Situational awareness camera with build-in PTZ and Z-Wave®

AXIS M5000-G PTZ Camera 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 offers wireless I/O connectivity with Z-Wave Plus® devices to communicate with up to six devices in a system setup for instance monitor temperatures in freezers or turn lights on/off. With AXIS M5000-G, you get the benefits of four cameras while installing just one camera.

- > [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](#)
- > [Z-Wave for smart home devices](#)



# AXIS M5000-G PTZ Camera

## Variants

AXIS M5000-G EU  
AXIS M5000-G JP  
AXIS M5000-G US

## 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

### Image settings

Saturation, contrast, brightness, sharpness, WDR – forensic capture, white balance, day/night threshold, tone mapping, exposure mode, exposure zones, compression, Z-Wave overlay, 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

## Audio

### Audio streaming

Two-way, full duplex

### Audio encoding

24bit 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

IP address filtering, HTTPS<sup>1</sup> encryption, IEEE 802.1x (EAP-TLS)<sup>1</sup> network access control, user access log, centralized certificate management

### Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS<sup>1</sup>, HTTP/2, 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, 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), Z-Wave Plus® v2

## System integration

### Application Programming Interface

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

One-click cloud connection

ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at [onvif.org](http://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](http://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](http://axis.com/acap)

## Approvals

### EMC

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

EN 61000-6-2

Japan: VCCI Class A

USA: FCC Part 15 Subpart B Class A

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

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 ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

## Safety

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

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## 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

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## Wireless

EN 62311, EN 300220-2, EN 301489-1, EN 301489-3,  
MIC, FCC Part 15 Subpart C, RSS-210

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## Network

NIST SP500-267

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## 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, 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

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### 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

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### 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)

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## General

### Casing

IP51-rated

Repaintable plastic casing, polycarbonate (PC) dome

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## Sustainability

PVC free, BFR/CFR free

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## Power

Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4  
Typical 7.6 W, max 13.4 W  
20–28 V DC, typical 6.6 W, max 12.1 W  
(PoE midspan and power supply not included)

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## Connectors

RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE  
DC input terminal block  
Audio: mic/line in, line out terminal block

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## 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)

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## Operating conditions

0 °C to 40 °C (32 °F to 104 °F)  
Humidity 10–85% RH (non-condensing)

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## Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)  
Humidity 5–95% RH (non-condensing)

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## Dimensions

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

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## Weight

1.95 kg (4.3 lb)

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## Included accessories

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

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## Optional accessories

AXIS TM5601 Conduit Back Box

AXIS TM5801 Black Dome

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

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

## Warranty

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