

# AXIS Q6078-E PTZ Camera

## Outdoor-ready PTZ with UHD 4K

AXIS Q6078-E PTZ Camera offers UHD 4K with 20x optical zoom for outstanding video quality. It offers great overviews and detail with the clearest, sharpest colors. This high-performance outdoor PTZ camera comes with autotracking 2 with click and track functionality, as well as an orientation aid for active object tracking and quick orientation. Featuring built-in cybersecurity such as signed firmware and secure boot it ensures the integrity and authenticity of the firmware. Axis Zipstream with H.264/ H.265 significantly reduces bandwidth and storage requirements. Furthermore, AXIS Object Analytics offers highly granular and nuanced object classification.

- > **UHD 4K with 20x optical zoom**
- > **Outstanding images with great details**
- > **Zipstream with support for H.264/H.265**
- > **AXIS Object Analytics**
- > **Built-in cybersecurity features**



# AXIS Q6078-E PTZ Camera

## Camera

### Variants

AXIS Q6078-E 50 Hz

AXIS Q6078-E 60 Hz

### Image sensor

1/2.5" progressive scan RGB CMOS

### Lens

4.4–88.4 mm, F2.0–3.8

Horizontal field of view: 68.3°–4.2°

Vertical field of view: 42.1°–2.34°

Autofocus, P-iris control

### Day and night

Automatically removable infrared-cut filter

### Minimum illumination

Color: 0.2 lux at 30 IRE, F2.0

B/W: 0.002 lux at 30 IRE, F2.0

### Shutter speed

1/10000 s to 1 s

### Pan/Tilt/Zoom

Pan: 360° endless, 0.05°–450°/s

Tilt: 220°, 0.05°–450°/s

Zoom: 20x optical, 12x digital, total 240x zoom  
E-flip, 256 preset positions, tour recording (max 10, max duration 16 minutes each), guard tour (max 100), control queue, on-screen directional indicator, orientation aid PTZ, set new pan 0°, adjustable zoom speed, focus recall

## System on chip (SoC)

### Model

ARTPEC-7

### Memory

2 GB RAM, 512 MB Flash

### Compute capabilities

Machine learning processing unit (MLPU)

## 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

3840x2160 4K 2160p to 320x180

### Frame rate

Up to 25/30 fps (50/60 Hz) in 4K

Up to 50/60 fps (50/60 Hz) in all other resolutions

### 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

### Image settings

Manual shutter time, compression, color, brightness, sharpness, WDR – dynamic contrast, white balance, exposure control, exposure zones, fine tuning of behavior at low light, rotation: 0°, 180°, text and image overlay, polygon privacy masks, electronic image stabilization (EIS), freeze on PTZ, defog, backlight compensation, scene profiles

### Signal-to-noise ratio

>55 dB

## 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, 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, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, NTCIP, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)

1. 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).

## System integration

### Application Programming Interface

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

One-Click Cloud Connection

ONVIF® Profile G, ONVIF® Profile S and ONVIF® Profile T, specification at [onvif.org](https://onvif.org)

### 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

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  
Edge storage: recording ongoing, storage disruption  
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: live stream open

### Event actions

Day/night mode, overlay text, video recording to edge storage, pre- and post-alarm video buffering, send SNMP trap  
PTZ: PTZ preset, start/stop guard tour  
File upload via FTP, SFTP, HTTP, HTTPS network share and email  
MQTT publish  
Notification via email, HTTP, HTTPS and TCP

### Built-in installation aids

Pixel counter, leveling guide

## Analytics

### Applications

#### Included

AXIS Object Analytics, AXIS Scene Metadata, AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, autotracking 2, active gatekeeper, AXIS OSDI Zones, Orientation Aid PTZ  
Support for AXIS Camera Application Platform enabling installation of third-party applications, see [axis.com/acap](https://axis.com/acap)

### AXIS Object Analytics

Object classes: humans, vehicles

Scenarios: line crossing, object in area, time in area

Up to 10 scenarios

Other features: triggered objects visualized with trajectories, color-coded bounding boxes and tables

Polygon include/exclude areas

Perspective configuration

ONVIF Motion Alarm event

### AXIS Scene Metadata

Object classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates

Object attributes: confidence, position

## Approvals

### EMC

EN 55032 Class A, EN 55035, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, EN 50121-4, IEC 62236-4

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

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

Japan: VCCI Class A

Korea: KCC KN32 Class A, KN35

USA: FCC Part 15 Subpart B Class A

### Safety

IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC/EN/UL 62368-1, IS 13252

### Environment

IEC/EN 60529 IP66/IP67, NEMA TS 2 (2.2.7-2.2.9), IEC 62262 IK10, ISO 4892-2, EN 50121-4, IEC 62236-4, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-60, IEC 60068-2-78, NEMA 250 Type 4X

### Network

NIST SP500-267

### Cybersecurity

ETSI EN 303 645, BSI IT Security Label, FIPS 140

Midspan: EN 60950-1, GS, UL, cUL, CE, FCC, VCCI, CB, KCC, UL-AR

## 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 keystore, signed video, 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

### 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-, NEMA 4X- and IK10-rated Metal casing (aluminum), polycarbonate (PC) clear dome, sunshield (ASA)

### Sustainability

PVC free

### Power

Axis High PoE 60 W SFP midspan: 100–240 V AC, max 66.1 W

Camera consumption: typical 16 W, max 51 W

### Connectors

RJ45 10BASE-T/100BASE-TX PoE, RJ45 Push-pull Connector (IP66/IP67) included

### 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

With 30 W: -20 °C to 50 °C (-4 °F to 122 °F)

With 60 W: -50 °C to 50 °C (-58 °F to 122 °F)

Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F)

Arctic Temperature Control: Start-up as low as -40 °C (-40 °F)

Humidity 10–100% RH (condensing)

### Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)

### Weight

3.75 kg (8.3 lb)

### Dimensions

Ø232 x 271 mm (Ø9 1/8 x 10.7 in)

### Included accessories

Axis High PoE 60 W SFP midspan 1-port, RJ45 Push-pull Connector (IP66), Sunshield

Installation Guide, Windows decoder 1-user license

### Optional accessories

Smoked dome cover

AXIS T91 Mounting Accessories, AXIS T8415 Wireless Installation Tool, AXIS T90 Illuminators, AXIS T8310 Video Surveillance Control Board, multi-user decoder license pack

### 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)

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)).