AXIS XPQ1785 Explosion-Protected PTZ Camera

Globally certified explosion-protected positioning camera

AXIS XPQ1785 is a robust, stainless steel (316L) PTZ camera globally certified for use in potentially combustible environments according to Class I/II/III Div 1 and Zone 1,21 (NEC, CEC, IECEx, ATEX, and more). The built-in smoke alert analytic monitors for signs of smoke or fire. The camera offers total situational awareness with 360° continuous pan and +/- 90° tilt, both at up to 200°/sec. Axis Zipstream provides exceptional savings on bandwidth and storage requirements without compromising image quality. Ease of installation is supported by a compact and low-weight design, with both RJ45 and SFP for fiber or coax and 100–240 V AC power input.

> **Worldwide hazardous area certifications**
> **Smoke alert analytics**
> **Zipstream and Lightfinder**
> **HDTV 1080p with 32x optical zoom**
> **-60 ℃ to 60 ℃ (-76 °F to 140 °F)**

HDTV NETWORK VIDEO

ONVIF® | GST

AXIS XPQ1785 Explosion-Protected PTZ Camera

Camera

Image sensor
1/2.8" progressive scan RGB CMOS

Lens
4.3–137 mm, F1.4–4.0
Horizontal field of view: 60°–2.3°
Vertical field of view: 39°–1.3°
Autofocus

Minimum illumination
Color: 0.16 lux at 50 IRE F1.4
B/W: 0.03 lux at 50 IRE F1.4

Shutter speed
1/66500 s to 1 s

Pan/Tilt/Zoom
Pan: 360° endless, 0.6 - 200°/s
Tilt: ±90°, 0.6 - 200°/s
32x optical zoom and 12x digital zoom, total 384x zoom
100 preset positions, preset accuracy ±0.05°, Guard Tour, Control queue

System on chip (SoC)

Model
ARTPEC-6

Memory
1024 MB RAM, 512 MB Flash

Video

Video compression
H.264 (MPEG-4 Part 10/AVC) Baseline, and Main profiles
Motion JPEG

Resolution
1920x1080 HDTV 1080p to 160x90
Maximum pixel density with 32x optical zoom:
25 m (82 ft): 1912 px/m
50 m (164 ft): 956 px/m
250 m (820 ft): 191 px/m

Frame rate
With WDR: Up to 25/30 fps (50/60 Hz) in all resolutions
Without WDR: Up to 50/60 fps (50/60 Hz) in all resolutions

Video streaming
Multiple, individually configurable streams in H.264 and Motion JPEG
Axis Zipstream technology in H.264
Controllable frame rate and bandwidth
VBR/MBR H.264

Image settings
Saturation, contrast, brightness, sharpness, Forensic WDR, defogging, white balance, exposure mode, exposure zones, compression, mirroring of images, electronic image stabilization, text and image overlay, dynamic text and image overlay
Rotation: 0°, 180°
Scene profiles: forensic, vivid, traffic overview, backlit entrance

Network

Network protocols
IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS[1], HTTP/2, TLS[1], 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, RTCP, ICMP, 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/developer-community*.
One-Click cloud connection
ONVIF® Profile G, 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*.

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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).*

Event conditions

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

Event actions

Day-night mode, defog, guard tours, overlay text, preset positions, SNMP trap messages, status LED, WDR mode
MQTT: publish
Notification: email, HTTP, HTTPS and TCP
Record video: SD card and network share
Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email

Data streaming

Event data

Built-in installation aids

Pixel counter

Analytics

Applications
Included
Smoke alert, AXIS Video Motion Detection, AXIS Fence Guard, AXIS Loitering Guard, AXIS Motion Guard, active tampering alarm, gatekeeper
Supported
AXIS Perimeter Defender, AXIS Cross Line Detection
Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/ acap*

Approvals

EMC
EN/IEC 55032 Class A, EN/IEC 61000-3-2,
EN/IEC 61000-3-3, EN/IEC 61000-6-1,
EN/IEC 61000-6-2, EN/IEC 55035
Australia/New Zealand: RCM AS/NZS CISPR 32 Class A
Canada: ICES(A)/NMB(A)
Japan: VCCI Class A
USA: FCC Part 15 Subpart B Class A

Safety
EN/IEC 62368-1, UL 62368-1, CSA C22.2 No. 62368-1, IS 13252

Environment
IEC/EN 60529 IP66, IP67, IP68
IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-64
EN/IEC 62262 IK10 (IK08 front glass), UL 50E/CSA C22.2 No 94.2 Type 4X

Explosion
IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-31,
UL 60079-0, UL 60079-1, UL 60079-31,
CSA C22.2 No. 60079-0, CSA C22.2 No. 60079-1,
CSA C22.2 No. 60079-31
CSA C22.2 No. 25, CSA C22.2 No. 30,
CSA C22.2 No 213, UL 1203, UL121201

Certifications

Type P21
ATEX:
I M2 Ex db I Mb
II 2 G Ex db IIC T5 Gb
II 2 D Ex tb IIIC T100°C Db
Certificate: ExVeritas 20ATEX0651X
IECEx:
Ex db I Mb
Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
Certificate: IECEx EXV 20.0017X
cMETus:
Class I Div 1 Groups B,C,D T5
Class II Div 1 Groups E,F,G T5
Class I Zone 1 AEx db IIC Gb
Zone 21 AEx tb IIIC
Certificate: MET E115198
INMETRO:
Ex db I Mb
Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
Certificate: CPEx 22.0478 X
IA:
Ex db I Mb
Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
Certificate: MASC MS/22-8127X
OSHA Taiwan:
Ex db I Mb
Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
Certificate: TD100043
PESO:
Ex db IIC T5 Gb
Certificate: 526087/4
KCs:
Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
Certificate: 23-KA4BO-0066X and 23-KA4BO-0067X
JPEx:
Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
Certificate: DEK23.0064X

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, AES-XTS-Plain64 256bit SD card encryption

Network security
IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)[2], IEEE 802.1AE (MACsec PSK/EAP-TLS), HTTPS/HSTS[2], TLS v1.2/v1.3[2], 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)
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
IP66-, IP67- and IP68-rated, electropolished ASTM 316L (EN 1.4404) stainless steel casing for maximum corrosion protection
Wiper included

Power
Max consumption: 150 W
Power input: 100–240 V AC

Connectors
Two M25x1.5 cable entries
3-pole connector for power, 0.2 - 3.0 mm² (24 - 12 AWG)
2-pole connector for 48 V DC (max 14.4 W) AUX out, 0.2 - 3.0 mm² (24 - 12 AWG)
RJ45 10BASE-T/100BASE-TX
SFP cage for alternative network connection

Storage
Pre-installed AXIS Surveillance microSDXC Card 128 GB
Support for SD card encryption
Recording to network-attached storage (NAS)
For SD card and NAS recommendations see *axis.com*

Operating conditions
-60 °C to 60 °C (-76 °F to 140 °F)
Start-up temperature: -40 °C
Humidity 10–100% RH (condensing)

Storage conditions
-40 °C to 65 °C (-40 °F to 149 °F)
Humidity 0-98% RH (non-condensing)

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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 (eay@cryptsoft.com).*

Dimensions
240 x 301 x 372 mm (9.45 x 11.85 x 14.63 in)

Weight
23 kg (50.7 lb)

Box content
Camera, installation guide, installation manual IM001, AXIS TQ1924–E Washer Nozzle, connector kit, installation kit, owner authentication key, Declaration of Conformity
AXIS TQ1917 Adapter M25x1.5-3/4 NPT (02278-001 only)
AXIS TQ1943-E Cable Gland Ex d Armored M25 (02278-005 only)

Optional accessories
AXIS TQ1301-E Pole Mount 50-150 mm (material: stainless steel, weight: 5.3 kg, dimensions: 190 x 234 x 250 mm, maximum load: 150 kg)
AXIS TQ1001-E Wall Mount (material: stainless steel, weight: 3.8 kg, dimensions: 170 x 150 x 350 mm, maximum load: 150 kg)
AXIS TQ1301-E Pole Mount need to be combined with AXIS TQ1001-E Wall Mount.
For more accessories, see *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*

Sustainability

Environmental responsibility
axis.com/environmental-responsibility
Axis Communications is a signatory of the UN Global Compact, read more at *unglobalcompact.org*

AXIS®
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