

## AXIS Q1715 Block Camera

High performance with endless options

AXIS Q1715 delivers HDTV 1080p at 60 fps with WDR and 21x optical zoom for all the details. It includes a deep learning processing unit, which allows for advanced features and powerful analytics based on deep learning at the edge. With AXIS Object Analytics, it can detect and classify humans, vehicles, and types of vehicles. And, it provides analytics metadata based on deep learning on the edge. Lightweight in design, it's easy to install in accessory housings and casings. It offers support for 2-way audio and supervised I/O. Furthermore, it features built-in cybersecurity features to prevent unauthorized access and safeguard your system.

- > 1080p at 120 fps with 21x zoom
- > Support for analytics with deep learning
- > Granular object classification
- > Ideal for accessory housings and casings
- > HDMI and HD-SDI output



## AXIS Q1715 Block Camera

### Camera

#### Image sensor

1/2.8" progressive scan RGB CMOS

#### Lens

Varifocal, 4–84.6 mm, F1.6–F4.5  
Horizontal field of view: 76°–3.6°  
Vertical field of view: 42°–2.2°  
Autofocus, P-Iris control

#### Day and night

Automatically removable infrared-cut filter

#### Minimum illumination

1080p 25/30 fps with Forensic WDR and Lightfinder 2.0:  
Color: 0.1 lux at 50 IRE F1.5  
B/W: 0.02 lux at 50 IRE F1.5  
1080p 50/60 fps with Forensic WDR and Lightfinder 2.0:  
Color: 0.2 lux at 50 IRE F1.5  
B/W: 0.04 lux at 50 IRE F1.5  
1080p 100/120 fps without WDR  
Color: 0.4 lux at 50 IRE F1.6  
B/W: 0.08 lux at 50 IE F1.6

#### Shutter speed

1/66500 s to 2 s

#### Pan/Tilt/Zoom

Zoom: 21x optical  
Up to 100 preset positions, control queue, adjustable zoom speed  
Uploadable PTZ driver

### System on chip (SoC)

#### Model

ARTPEC-7

#### Memory

2048 MB RAM, 1024 MB Flash

#### Compute capabilities

Deep learning processing unit (DLPU)

### 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

1920x1080 HDTV 1080p to 160x90

#### Frame rate

With WDR: Up to 50/60 fps (50/60 Hz) in all resolutions  
No WDR: Up to 100/120 fps in all 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  
Low latency mode  
Video streaming indicator

#### Image settings

Saturation, contrast, brightness, sharpness, Forensic WDR: up to 120 dB depending on scene, white balance, day/night threshold, tone mapping, local contrast, EIS, exposure mode, exposure zones, defogging, compression, rotation: auto, 0°, 90°, 180°, 270° including Corridor Format, dynamic text and image overlays, polygon privacy mask, mirroring of images  
Scene profiles: forensic, vivid, traffic overview

### Audio

#### Audio encoding

SDI: AES3 24 bit, 48 kHz  
HDMI: LPCM 24 bit, 48 kHz  
Network: AAC-LC 8/16/32/44.1/48 kHz, G.711  
PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz, LPCM 48 kHz

#### Audio input/output

External microphone input or line input, ring power, network speaker pairing

## Network

### 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, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, DHCPv4/v6, SSH, SIP, 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®, metadata, and AXIS Camera Application Platform (ACAP); specifications at [axis.com/developer-community](https://axis.com/developer-community).

One-click cloud connection

ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at [onvif.org](https://onvif.org)  
Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX.

### 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).

### Event conditions

Audio: audio clip playing, audio detection  
Device status: above operating temperature, above or below operating temperature, below operating temperature, IP address removed, network lost, new IP address, ring power overcurrent protection, storage failure, system ready, within operating temperature, shock detection  
Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal OK  
Edge storage: recording ongoing, storage disruption  
I/O: digital input, 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, tampering

### Event actions

Record video: SD card and network share  
MQTT publish  
Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email  
Pre- and post-alarm video or image buffering for recording or upload  
Notification: email, HTTP, HTTPS, TCP and SNMP trap  
PTZ: PTZ preset, start/stop guard tour  
Overlay text, external output activation, play audio clip, zoom preset, day/night mode, make call

### Data streaming

Event data

### Built-in installation aids

Leveling guide, pixel counter, license plate capture assistant

## Analytics

### Applications

#### Included

AXIS Object Analytics, AXIS Scene Metadata  
AXIS Video Motion Detection

#### Supported

AXIS Audio Spectrum Visualizer  
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 (types: cars, buses, trucks, bikes, other)  
**Scenarios:** line crossing, object in area, crossline counting, 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 data:** Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates  
Confidence, position

1. 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 ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)).

## Approvals

### EMC

EN 55035, EN 55032 Class A, EN 61000-3-2,  
EN 61000-3-3, EN 61000-6-1, EN 61000-6-2

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

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

Japan: VCCI Class A

Korea: KS C 9832 Class A, KS C 9835

USA: FCC Part 15 Subpart B Class A

### 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

### 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 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

Aluminum and plastic casing

Color: NCS S 9000-N

### Sustainability

PVC free, BFR/CFR free

### Power

Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4

Typical: 12.4 W, max 14.2 W

10–28 V DC, typical 12 W, max 13.5 W

When PoE Class 3 is selected:

Power over Ethernet IEEE 802.3af/802.3at Type 1  
Class 3

Typical: 11.7 W, max 12.9 W

10–28 V DC, typical 10.8 W, max 12.4 W

### Connectors

Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE  
I/O: 6-pin 2.5 mm terminal block for four configurable  
inputs

RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block  
3.5 mm mic/line in

DC input

HDMI Type D, BNC for SDI

I2C for AXIS TQ1809-LE Housing

Security lock slot

### Storage

Support for microSD/microSDHC/microSDXC card

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

Recording to network-attached storage (NAS)

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

### Operating conditions

–20 °C to 50 °C (–4 °F to 122 °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)

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)).

**Dimensions**

Height: 66 x 80 x 195 mm (2.6 x 3.1 x 7.7 in)

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**Weight**

650 g (1.4 lb)

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**Included accessories**

Installation guide, Windows® decoder 1-user license, stand, connector kit, TORX® T20 screw driver, RESISTORX® L-key, terminal block connector

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**Optional accessories**

AXIS TQ1809-LE Housing T92G<sup>3</sup>

AXIS T8415 Wireless Installation Tool

AXIS Surveillance Cards

For more accessories, see *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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**Warranty**

5-year warranty, see *axis.com/warranty*

3. The HDMI and SDI outputs are not available when the camera is mounted in the TQ1809-LE Housing.