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[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, 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*.
One-click cloud connection
ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at *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*.

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*

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), and cryptographic software written by Eric Young (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 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)[2], IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, 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)
To download documents, go to *axis.com/support/cybersecurity/resources*
To read more about Axis cybersecurity support, go to *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*

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), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

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

Weight
650 g (1.4 lb)

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

Optional accessories
AXIS TQ1809-LE Housing T92G[3]
AXIS T8415 Wireless Installation Tool
AXIS Surveillance Cards
For more accessories, see *axis.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*

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