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

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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, HTTP/2, TLS, 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*. ACAP includes Native SDK and Computer Vision SDK. 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.
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

AXIS Object Analytics	**Object classes:** humans, vehicles (types: cars, buses, trucks, bikes) **Scenarios:** line crossing, object in area, crossline counting, time in area Up to 10 scenarios Metadata visualized with trajectories, color-coded bounding boxes and tables Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event
Metadata	**Object data:** Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Confidence, position **Event data:** Producer reference, scenarios, trigger conditions
Applications	**Included** AXIS Object Analytics 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*

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

Cybersecurity

Edge security	**Software:** Signed firmware, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization

	Code Flow for centralized ADFS account management, password protection, 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), IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, 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)
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[a] AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards For more accessories, see *axis.com*
Video management software	AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at *axis.com/vms*
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*

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

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