

# 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	
<b>Image sensor</b>	1/2.8" progressive scan RGB CMOS
<b>Lens</b>	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
<b>Day and night</b>	Automatically removable infrared-cut filter
<b>Minimum illumination</b>	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
<b>Shutter speed</b>	1/66500 s to 2 s
<b>Pan/Tilt/Zoom</b>	Zoom: 21x optical Up to 100 preset positions, control queue, adjustable zoom speed Uploadable PTZ driver

System on chip (SoC)	
<b>Model</b>	ARTPEC-7
<b>Memory</b>	2048 MB RAM, 1024 MB Flash
<b>Compute capabilities</b>	Deep learning processing unit (DLPU)

Video	
<b>Video compression</b>	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main Profile Motion JPEG
<b>Resolution</b>	1920x1080 HDTV 1080p to 160x90
<b>Frame rate</b>	With WDR: Up to 50/60 fps (50/60 Hz) in all resolutions No WDR: Up to 100/120 fps in all resolutions
<b>Video streaming</b>	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
<b>Image settings</b>	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	
<b>Audio encoding</b>	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
<b>Audio input/output</b>	External microphone input or line input, ring power, network speaker pairing

Network	
<b>Network protocols</b>	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	
<b>Application Programming Interface</b>	Open API for software integration, including VAPIX®, metadata, and AXIS Camera Application Platform (ACAP); specifications at <a href="http://axis.com/developer-community">axis.com/developer-community</a> . 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 <a href="http://onvif.org">onvif.org</a>

	Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX.
<b>Event conditions</b>	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
<b>Event actions</b>	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
<b>Data streaming</b>	Event data
<b>Built-in installation aids</b>	Leveling guide, pixel counter, license plate capture assistant
Analytics	
<b>AXIS Object Analytics</b>	<b>Object classes:</b> humans, vehicles (types: cars, buses, trucks, bikes) <b>Scenarios:</b> 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
<b>Metadata</b>	<b>Object data:</b> Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates <b>Confidence,</b> position <b>Event data:</b> Producer reference, scenarios, trigger conditions
<b>Applications</b>	<b>Included</b> AXIS Object Analytics AXIS Video Motion Detection <b>Supported</b> AXIS Audio Spectrum Visualizer Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="http://axis.com/acap">axis.com/acap</a>
Approvals	
<b>EMC</b>	EN 55035, EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2 <b>Australia/New Zealand:</b> RCM AS/NZS CISPR 32 Class A <b>Canada:</b> ICES-3(A)/NMB-3(A) <b>Japan:</b> VCCI Class A <b>Korea:</b> KS C 9832 Class A, KS C 9835 <b>USA:</b> FCC Part 15 Subpart B Class A
<b>Safety</b>	CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1, IS 13252
<b>Environment</b>	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78
<b>Network</b>	NIST SP500-267
<b>Cybersecurity</b>	ETSI EN 303 645
Cybersecurity	
<b>Edge security</b>	<b>Software:</b> 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

HDMI Type D, BNC for SDI  
 I2C for AXIS TQ1809-LE Housing  
 Security lock slot

<b>Network security</b>	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
<b>Documentation</b>	<i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> AXIS OS Software Bill of Material (SBOM) To download documents, go to <a href="http://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a> To read more about Axis cybersecurity support, go to <a href="http://axis.com/cybersecurity">axis.com/cybersecurity</a>
<b>General</b>	
<b>Casing</b>	Aluminum and plastic casing Color: NCS S 9000-N
<b>Sustainability</b>	PVC free, BFR/CFR free
<b>Power</b>	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
<b>Connectors</b>	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

<b>Storage</b>	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 <a href="http://axis.com">axis.com</a>
<b>Operating conditions</b>	-20 °C to 50 °C (-4 °F to 122 °F) Humidity 10-85% RH (non-condensing)
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (non-condensing)
<b>Dimensions</b>	Height: 66 x 80 x 195 mm (2.6 x 3.1 x 7.7 in)
<b>Weight</b>	650 g (1.4 lb)
<b>Included accessories</b>	Installation guide, Windows® decoder 1-user license, stand, connector kit, TORX® T20 screw driver, RESISTORX® L-key, terminal block connector
<b>Optional accessories</b>	AXIS TQ1809-LE Housing T92G <sup>a</sup> AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards For more accessories, see <a href="http://axis.com">axis.com</a>
<b>Video management software</b>	AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at <a href="http://axis.com/vms">axis.com/vms</a>
<b>Languages</b>	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
<b>Warranty</b>	5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>

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

Aegis Electronic Group  
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