

AXIS Q1656-BE Box Camera

Outstanding performance in 4 MP

With 4 MP resolution at up to 60 fps, a 1/1.8" sensor, and Lightfinder 2.0, AXIS Q1656-BE delivers exceptional video quality even in poor light conditions. Based on the latest Axis system-on-chip (SoC), it offers support for advanced features and applications based on deep learning on the edge. And AXIS Object Analytics provides highly nuanced object classification. With built-in cybersecurity features, it prevents unauthorized access and safeguards your system. This outdoor-ready barebone unit comes without lens and mounting, but with a variety of lenses, mounting options, and IR illumination kits, you can create a unique camera to meet your needs.

- > [Exceptional images with 1/1.8" sensor](#)
- > [Support for analytics with deep learning](#)
- > [Built-in cybersecurity features](#)
- > [Support for i-CS lens](#)
- > [Ready to customize for specific needs](#)



AXIS Q1656-BE Box Camera

Camera	
Image sensor	1/1.8" progressive scan RGB CMOS
Day and night	Automatically removable infrared-cut filter
Minimum illumination	4 MP 25/30 fps with Forensic WDR and Lightfinder 2.0 Color: 0.05 lux at 50 IRE, F1.5 B/W: 0.01 lux at 50 IRE, F1.5 4 MP 50/60 fps with Lightfinder 2.0 Color: 0.1 lux at 50 IRE, F1.5 B/W: 0.02 lux at 50 IRE, F1.5 4 MP 25/30 fps with Forensic WDR and Lightfinder 2.0 Color: 0.02 lux at 50 IRE, F0.9 B/W: 0.004 lux at 50 IRE, F0.9 Lens not included
Shutter speed	1/47500 s to 1 s
System on chip (SoC)	
Model	ARTPEC-8
Memory	2048 MB RAM, 8194 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	16:9 2688x1512 Quad HD to 160x90 4:3 2016x1512 to 160x120
Frame rate	No WDR: Up to 60/50 fps (60/50 Hz) in all resolutions WDR: Up to 30/25 fps (60/50 Hz) 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 Video streaming indicator
Multi-view streaming	Up to 8 individually cropped out view areas
Image settings	Saturation, contrast, brightness, Forensic WDR: Up to 120 dB depending on scene, white balance, day/night threshold, tone mapping, exposure mode, exposure zones, defogging, barrel distortion correction, electronic image stabilization, compression, rotation: 0°, 90°, 180°, 270° including Corridor Format, mirroring, dynamic text and image overlay, polygon privacy mask
Pan/Tilt/Zoom	Digital PTZ, 2.5x optical zoom, preset positions Uploadable PTZ driver (Pelco D pre-installed)
Audio	
Audio streaming	Two-way, full duplex Noise reduction
Audio encoding	24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate
Audio input/output	External microphone input or line input, line output, ring power, digital audio input, automatic gain control
Network	
Security	Password protection, IP address filtering, HTTPS ^a encryption, IEEE 802.1x (EAP-TLS) ^a network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot, protection of cryptographic keys with FIPS 140-2 certified TPM 2.0 module, Axis Edge Vault with Axis device ID
Supported protocols	IPv4, IPv6 USGv6, HTTP, HTTPS ^a , HTTP/2, TLS ^a , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP ^b , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SRTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, LLDP, MQTT v3.1.1, Syslog
System integration	
Application Programming Interface	Open API for software integration, including VAPIX [®] and AXIS Camera Application Platform; specifications at axis.com One-click cloud connection

	ONVIF [®] Profile G, ONVIF [®] Profile M, ONVIF [®] Profile S, and ONVIF [®] Profile T, specification at onvif.org
Onscreen controls	Electronic image stabilization Day/night shift Defogging Wide dynamic range Video streaming indicator Heater
Event conditions	Analytics, external input, supervised external input, edge storage events, virtual inputs through API Audio: audio detection Device status: above operating temperature, above or below operating temperature, below operating temperature, IP address removed, network lost, new IP address, shock detected, storage failure, system ready, within operating temperature, casing open Edge storage: recording ongoing, storage disruption I/O: digital input, manual trigger, virtual input PTZ: PTZ malfunctioning, PTZ movement, PTZ preset position reached, PTZ ready Scheduled and recurring: scheduled event Video: live stream open
Event actions	Record video: SD card and network share 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
Data streaming	Event data
Built-in installation aids	Remote back focus, leveling assistant, pixel counter i-CS lens: Remote zoom and focus
Analytics	
AXIS Object Analytics	Object classes: humans, vehicles (types: cars, buses, trucks, bikes) Trigger conditions: line crossing, object in area Up to 10 scenarios Metadata visualized with color-coded bounding boxes Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event
Applications	Included AXIS Object Analytics AXIS Video Motion Detection Supported Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap
General	
Casing	IP66-, IP67-, and NEMA 4X-rated, IK10 impact-resistant aluminum enclosure with integrated dehumidifying membrane IK10 impact-resistant plastic front window weathershield with black anti-glare coating Color: white NCS S 1002-B For repainting instructions, go to the product's support page. For information about the impact on warranty, go to axis.com/warranty-implication-when-repainting .
Sustainability	
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 2 Class 4 Typical 11.8 W, max 12.95 W 10–28 V DC, typical 11.2 W, max 25.2 W Power redundancy
Connectors	RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE Terminal block for two supervised and two unsupervised configurable inputs / digital outputs (12 V DC output, max load 50 mA) RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block DC input, terminal block, 3.5 mm mic/line in, 3.5 mm line out i-CS connector (compatible with P-Iris and DC-Iris)
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	-40 °C to 60 °C (-40 °F to 140 °F) Arctic Temperature Control: Start-up at -40 °C (-40 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Humidity 10–100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
Approvals	EMC CISPR 24, CISPR 35, EN 55032 Class A, EN 55035, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(B)/NMB-3(B), EN 50121-4, IEC 62236-4, KS C 9832 Class A, KS C 9815, KS C 9835, KS C 9547, RCM AS/NZS CISPR 32 Class A, VCCI Class A Safety IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IEC 62471 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, IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9), ISO 21207 (Method B) Network NIST SP500-267
Dimensions	404 x 159 x 182 mm (16 x 6.3 x 7.2 in)

Weight	3.3 kg (7.3 lb)
Included accessories	Sunshield, connector kit, resistorx® T20 tool, installation guide, Windows® decoder 1-user license
Optional accessories	AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards For more accessories, see axis.com
Optional lenses	Lens CS 4–10 mm F0.9 P-Iris Lens i-CS 9–50 mm F1.5 8 MP Lens CS 12–50 mm F1.4 P-Iris 8 MP Lens i-CS 1/1.8" 3.9–10 mm F1.5
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
Warranty	5-year warranty, see axis.com/warranty

- a. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eyay@cryptsoft.com).

Environmental responsibility:

axis.com/environmental-responsibility