

AXIS Q1656-LE 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-LE delivers exceptional video quality even in poor light conditions. Plus, a built-in wiper ensures great images in all weather conditions. Based on the latest Axis system-on-chip (SoC), it offers support for advanced features and powerful applications based on deep learning on the edge. And, AXIS Object Analytics offers highly nuanced object classification. This outdoor-ready camera includes premium Q-line functionality and support for PoE and redundant DC power. Furthermore, enhanced security functionality prevents unauthorized access and safeguards your system.

- > **Exceptional images with 1/1.8" sensor**
- > **Support for analytics with deep learning**
- > **Enhanced security features**
- > **Premium Axis Q-line camera functionality**
- > **Built-in wiper for snow and rain**



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Camera		System integration	
Image sensor	1/1.8" progressive scan RGB CMOS	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
Lens	Varifocal, 3.9–10 mm, F1.5 Horizontal field of view: 113°–47° Vertical field of view: 60°–27° Autofocus, i-CS lens, IR corrected, remote zoom and focus, P-Iris control Minimum focus distance: 0.5 m (1.6 ft)	Onscreen controls	Electronic image stabilization Day/night shift Defogging Wide dynamic range Video streaming indicator IR illumination Timed wiper Wiper Heater
Day and night	Automatically removable infrared-cut filter	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 Video: tampering, average bitrate degradation, day-night mode 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
System on chip (SoC)		Event actions	Overlay text, external output activation, play audio clip, zoom preset I/O: toggle I/O once, toggle I/O while the rule is active Illumination: use lights, use lights while the rule is active MQTT: publish Notification: HTTP, HTTPS, TCP, and email Pre- and post-alarm video or image buffering for recording or upload PTZ: PTZ preset, start/stop guard tour Record video: SD card and network share SNMP traps: send, send while the rule is active Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share, and email
Model	ARTPEC-8	Built-in installation aids	Remote zoom and focus, remote back focus, leveling assistant, pixel counter
Memory	2048 MB RAM, 8194 MB Flash	Analytics	
Compute capabilities	Deep learning processing unit (DLPU)	AXIS Object Analytics	Object classes: humans, vehicles (types: cars, buses, trucks, bikes) Scenarios: line crossing, object in area, crossline counting, occupancy in area, 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
Video		Metadata	Object data: Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Attributes: Vehicle color, upper/lower clothing color, confidence, position Event data: Producer reference, scenarios, trigger conditions
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	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
Resolution	16:9 2688x1512 Quad HD to 160x90 4:3 2016x1512 to 160x120	Cybersecurity	
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	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+), system-on-chip security (TEE), Axis device ID, secure
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		
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, 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			
Network protocols	IPv4, IPv6 USGv6, HTTP, HTTPS, HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS)		

	keystore, signed video, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, IP address filtering
Documentation	<p><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)</p> <p>To download documents, go to axis.com/support/cybersecurity/resources To read more about Axis cybersecurity support, go to axis.com/cybersecurity</p>
General	
Casing	<p>IP66-, IP67-, and NEMA 4X-rated, IK10 impact-resistant aluminum enclosure with integrated dehumidifying membrane IK08 impact-resistant glass front window with wiper 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.</p>
Sustainability	PVC free, BFR/CFR free, 2% recycled plastics, 7% bio-based plastics
Power	<p>Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 Typical 11.8 W, max 25.5 W 10–28 V DC, typical 11.2 W, max 25.5 W Power redundancy</p>
Connectors	<p>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)</p>
IR illumination	<p>OptimizedIR with power-efficient, long-life 850 nm IR LEDs Range of reach 50 m (164 ft) or more depending on the scene</p>
Illumination LED	<p>Power-efficient, long-life white LED Range of reach 25 m (82 ft) or more depending on the scene</p>
Storage	<p>Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Recording to network-attached storage (NAS)</p>

	For SD card and NAS recommendations see axis.com
Operating conditions	<p>–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)</p>
Storage conditions	<p>–40 °C to 65 °C (–40 °F to 149 °F) Humidity 5–95% RH (non-condensing)</p>
Approvals	<p>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(A)/NMB-3(A), 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</p> <p>Safety IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IEC 62471, IS 13252</p> <p>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)</p> <p>Network NIST SP500-267</p>
Dimensions	404 x 159 x 182 mm (16 x 6.3 x 7.2 in)
Weight	4.4 kg (9.7 lb)
Included accessories	AXIS T94Q01A Wall Mount, sunshield, connector kit, resistorx® T20 tool, installation guide, Windows® decoder 1-user license
Optional accessories	<p>AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards For more accessories, see axis.com</p>
Optional lenses	<p>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</p>
Video management software	AXIS Camera Station and 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