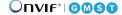# AXIS Q1647-LE Network Camera

5 MP video with 1/2" sensor and OptimizedIR

With AXIS Q1647-LE Network Camera it's easier than ever to capture everything. High resolution at full frame rate, i-CS lens and 1/2" sensor ensure outstanding details and sharp images. Even in challenging or low light scenes, Forensic WDR and Lightfinder ensure that details will be unveiled. The robust aluminum housing resists extreme temperatures, and comes with built-in IR LED illumination for surveillance in complete darkness. AXIS Q1647-LE enables proactive surveillance with pre-installed AXIS Guard Suite and orientation aid for quick orientation with multiple monitors. Zip-stream optimizes the video stream to maintain high video quality while saving bandwidth and storage.

> **5 MP resolution at 25/30 fps**

> **1/2" sensor**

> **Forensic WDR and Lightfinder**

> **Electronic image stabilization (EIS)**

> **AXIS Motion Guard, AXIS Fence Guard and AXIS Loitering Guard**

AXIS Q1647-LE Network Camera

Camera

Image sensor	1/2" progressive scan RGB CMOS
Lens	Varifocal, IR corrected, CS-mount 3.9–10.0 mm, F1.5 **5.3 MP (16:9):** Horizontal field of view: 92°–44° Vertical field of view: 50°–24° **4 MP (16:9):** Horizontal field of view: 95°–38° Vertical field of view: 52°–21° **5 MP (4:3):** Horizontal field of view: 81°–37° Vertical field of view: 60°–27° i-CS lens
Day and night	Automatically removable infrared-cut filter
Minimum illumination	**5 MP 25/30 fps with WDR and Lightfinder:** Color: 0.12 lux at 50 IRE, F1.5; B/W: 0.02 lux at 50 IRE, F1.5 **4 MP 50/60 fps:** Color: 0.24 lux at 50 IRE, F1.5, B/W; 0.04 lux at 50 IRE, F1.5 0 lux with IR illumination on
Shutter speed	1/100000 to 2 s
Pan/Tilt/Zoom	Digital PTZ, uploadable PTZ driver (Pelco D pre-installed)

System on chip (SoC)

Model	ARTPEC-6
Memory	1 GB RAM, 512 MB Flash

Video

Video compression	H.264 (MPEG-4 Part 10/AVC), Main, Baseline and High Profile Motion JPEG
Resolution	3072x1728 to 320x180
Frame rate	**5 MP with WDR:** 25/30 fps with power line frequency 50/60 Hz **4 MP without WDR:** 50/60 fps with power line frequency 50/60 Hz
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Axis Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/ABR/MBR H.264
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR – 120 dB, white balance, day/night threshold, exposure mode, exposure zones, compression, orientation: auto, 0°, 90°, 180°, 270°, mirroring of images, dynamic text overlay, image overlay, privacy masks, defogging, noise reduction, electronic image stabilization, barrel distortion correction, orientation aid, fine tuning of behavior at low light Scene profiles: forensic, vivid, traffic overview, backlit entrance

Audio

Audio streaming	Two-way, full duplex
Audio encoding	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 balanced/unbalanced microphone or line input, line output, automatic gain control 24 bit AD/DA-conversion

Network

Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS, TLS, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP™, SNMPv1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SFTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, 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® and AXIS Camera Application Platform; specifications at *axis.com* AXIS Video Hosting System (AVHS) with One-Click Connection One-click cloud connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specifications at *onvif.org*

Event conditions

Event conditions	Analytics, 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, casing open, IP address removed, network lost, new IP address, storage failure, system ready, within operating temperature 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	File upload: FTP, SFTP, HTTP, HTTPS, network share and email, send video clip Notification: email, HTTP, HTTPS and TCP Overlay text, Send SNMP Trap Video and audio recording to edge storage Pre- and post-alarm video buffering External output activation, day/night vision mode, play audio clip, status LED, WDR mode, defog mode, PTZ control MQTT publish
Data streaming	Event data
Built-in installation aids	i-CS: Remote zoom and focus Other lens: Remote back focus Traffic wizard, pixel counter, levelling assistant, autorotation

Analytics

Applications	**Included** AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, active tampering alarm, audio detection **Supported** AXIS Digital Autotracking, AXIS Perimeter Defender Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

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
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, IP address filtering
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	IP66-, IP67-, NEMA 4X- and IK10-rated Metal (Aluminium) Color front: Black - NCS S 9000-N Color chassi: White - NCS S 1002-B Intrusion alarm switch
Sustainability	PVC free
Power	Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4 Typical 12.3 W, max 25.5 W
Connectors	Shielded RJ45 10BASE-T/100BASE-TX PoE I/O: 6-pin 2.5 mm terminal block for four configurable inputs/outputs (12 V DC output, max load 50 mA) RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block 3.5 mm mic/line in, 3.5 mm line out i-CS connector (compatible with P-Iris and DC-iris)
IR illumination	OptimizedIR with power-efficient, long-life 850 nm IR LEDs Range of reach 30 m (98 ft) or more depending on the scene

Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*
Operating conditions	Arctic temperature control: Start-up at -40 °C to 60 °C (-40 °F to 140 °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** EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, EN 50121-4, IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A **Safety** IEC/EN/UL 60950-22, 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, IEC/EN 60529 IP66/67, IEC/EN 62262 IK10, NEMA 250 Type 4X NetworkNIST SP500–267 **Other** IEC 62471

Dimensions	178 x 206 x 494 mm (7 x 8.11 x 19.45 in)
Weight	6350 g (13.2 lb)
Included accessories	AXIS T94Q01A Wall Mount, AXIS T92G20 Outdoor Housing, connector kit, resistorx® T20 tool, installation guide, Windows® decoder 1-user license
Optional lenses	Fujinon Varifocal Lens 8-80 mm, DC-iris Lens CS 12-50 mm F1.4 P-Iris 8 MP Lens i-CS 9–50 mm F1.5 8 MP
Optional accessories	AXIS T90B Illuminators, Axis network cable couplers, AXIS T8129 PoE Extender, AXIS T8415 Wireless Installation Tool, Axis midspans 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, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Warranty	5-year warranty, see *axis.com/warranty*

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