

AXIS Q1647 Network Camera

5 MP video with 1/2" sensor and i-CS lens

With AXIS Q1647 Network Camera it's easier than ever to capture everything. High resolution at full frame rate, i-CS lens, and 1/2" sensor ensures outstanding details and sharp images. Even in challenging or low light, Forensic WDR and Lightfinder ensures details will be discovered. To minimize vibrations, electronic image stabilization (EIS) keeps the image steady. AXIS Q1647 enables proactive surveillance with preinstalled AXIS Motion Guard and AXIS Fence Guard. Orientation aid enables street view and compass rose for quick orientation with multiple monitors, and Zipstream 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 and AXIS Fence Guard**



AXIS Q1647 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: 110°–44°

Vertical field of view: 59°–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: 92°–37°

Vertical field of view: 68°–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

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° including corridor
format, 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, built-in microphone, automatic gain
control

24 bit AD/DA-conversion

Network

Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS¹, TLS¹, 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

Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at axis.com/vms.

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, 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

Support for additional applications if the device is used with compatible accessories. For more information, contact your Axis partner.

Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap

Approvals

EMC

EN 55032 Class A, EN 61000-3-2, EN 61000-3-3,

EN 55024, EN 61000-6-1, EN 61000-6-2

Australia/New Zealand: RCM AS/NZS CISPR 32 Class A

Canada: ICES-003 Class A

Japan: VCCI Class A

Korea: KCC KN32 Class A, KN35

USA: FCC Part 15 Subpart B Class A

Safety

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

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

Network

NIST SP500-267

Cybersecurity

Edge security

Software: Signed OS, 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)², IEEE 802.1AE (MACsec PSK/EAP-TLS), HTTPS/HSTS², TLS v1.2/v1.3², 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

Metal (zinc)

Color lid: Silver - RAL 9006

Color chassi: Black - NCS S 9000-N

Sustainability

PVC free

Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3

Typical 5.3 W, max 10.8 W

8-28 V DC, typical 6.4 W, max 11.2 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)

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

-20 °C to 60 °C (-4 °F to 140 °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

82 x 66 x 210 mm (3.23 x 2.60 x 8.25 in)

Weight

950 g (2.1 lb)

Included accessories

Stand, 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 T92G Housings, AXIS T93F Housings, Axis network cable couplers, AXIS T8129 PoE Extender, AXIS T8415 Wireless Installation Tool, Axis midspans

For more accessories, see axis.com

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

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