AXIS Q1659 Network Camera

Professional photography meets video surveillance

AXIS Q1659 offers ultra-high image resolution for surveillance in superb detail at 8 frames per second, achieving un-precedented levels of detail for observing open spaces and across long distances. It features digital single-lens reflex (DSLR) imaging technology and offers a choice of Canon EF/EF-S lenses, depending on individual user needs. Equipped with an EF lens mount, the camera enables easy lens changes. AXIS Q1659 is compatible with a large number of video management systems, and it supports Zipstream that significantly reduces bandwidth and storage requirements.

> **20 MP resolution**

> **Canon EF mount and EF/EF-S lenses**

> **Axis Zipstream technology**

> **PoE and SFP slot for optional fiber connection**

> **Optional accessory housing**

AXIS Q1659 Network Camera

Variants	**AXIS Q1659 24 mm, f/2.8** **AXIS Q1659 35 mm, f/2**[a] **AXIS Q1659 50 mm, f/1.4**[a] **AXIS Q1659 85 mm, f/1.2L**[a] **AXIS Q1659 100 mm, f/2.8L** **AXIS Q1659 10–22 mm, f/3.5-4.5** **AXIS Q1659 70–200 mm, f/2.8L** **AXIS Q1659 55–250 mm f/4-5.6**

Camera

Image sensor	22.4 x 15.0 mm APS-C CMOS-sensor
Lens	EF/EF-S mount **24 mm, f/2.8** Horizontal field of view: **20 MP** 50°, **11 MP/4K** 36° Vertical field of view: **20 MP** 35°, **11 MP** 28°, **4K** 21° **35 mm, f/2** Horizontal field of view: **20 MP** 36°, **11 MP/4K** 25°, Vertical field of view: **20 MP** 24°, **11 MP** 19°, **4K** 14° **50 mm, f/1.4** Horizontal field of view: **20 MP** 25°, **11 MP/4K** 18° Vertical field of view: **20 MP** 17°, **11 MP** 14°, **4K** 10° **85 mm, f/1.2L** Horizontal field of view: **20 MP** 15°, **11 MP/4K** 11° Vertical field of view: **20 MP** 10°, **11 MP** 8°, **4K** 6° **100 mm, f/2.8L** Horizontal field of view: **20 MP** 13°, **11 MP/4K** 9° Vertical field of view: **20 MP** 9°, **11 MP** 7°, **4K** 5° **10–22 mm, f/3.5-4.5** Horizontal field of view: **20 MP** 97°- 54°, **11 MP/4K** 76°- 39° Vertical field of view: **20 MP** 74°- 38°, **11 MP** 61°- 30°, **4K** 48°-29° **70–200 mm, f/2.8L** Horizontal field of view: **20 MP** 18°- 6°, **11 MP/4K** 13°- 5° Vertical field of view: **20 MP** 12°- 4°, **11 MP** 10°- 3°, **4K** 7°- 3° **55–250 mm f/4-5.6** Horizontal field of view: **20 MP** 23°-5°, **11 MP/4K** 16°-4° Vertical field of view: **20 MP** 16°- 3°, **11 MP** 12°- 3°, **4K** 9°- 2°
Day and night	Automatically removable infrared-cut filter
Minimum illumination	Color: 0.04 lux F1.2 B/W: 0.004 lux F1.2
Shutter speed	1/8000 to 1 s
Pan/Tilt/Zoom	Digital PTZ, uploadable PTZ driver (Pelco D pre-installed)

System on chip (SoC)

Model	ARTPEC-6
Memory	1 GB RAM, 256 MB Flash

Video

Video compression	H.264 (MPEG-4 Part 10/AVC), High, Main and Baseline Profile Motion JPEG
Resolution	5472x3648 to 320x240
Frame rate	5472x3648 (20 MP): 8 fps 3840x2880 (11 MP): 15 fps Ultra HD 2160p (4 K): 25 fps
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Controllable frame rate and bandwidth Axis Zipstream technology in H.264 VBR/ABR/CBR H.264
Multi-view streaming	Up to 4 individually cropped out view areas
Image settings	Compression, color, brightness, sharpness, white balance, exposure control, WDR – dynamic contrast, fine tuning of behavior at low light, text overlay, privacy mask, rotation: 0°, 180°, day and night shift level

Audio

Audio streaming	Two-way
Audio encoding	AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz Configurable bit rate, OPUS
Audio input/output	External microphone or line input, line output, automatic gain control

Network

Security	Password protection, IP address filtering, HTTPS[b] encryption, IEEE 802.1X[b] network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS[b], TLS[b], QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP™, SNMPv1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SFTP, 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* One-click cloud connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at *onvif.org*
Event triggers	Analytics, edge storage events, external input MQTT subscribe
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 MQTT publish
Data streaming	Event data
Built-in installation aids	Pixel counter, remote focus

Analytics

Applications	Included AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, AXIS Video Motion Detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

Approvals

EMC	EN 55035, EN 55032 Class A, EN 50121-4, EN 61000-6-1, EN 61000-6-2 **Australia/New Zealand:** RCM AS/NZS CISPR 32 Class A **Canada:** ICES-3(A)/NMB-3(A) **Japan:** VCCI Class A **Korea:** KC KN32 Class A, KC KN35 **USA:** FCC Part 15 Subpart B Class A **Railway:** IEC 62236-4
Safety	IEC/EN/UL 60950-1, IS 13252
Network	NIST SP500–267
Cybersecurity	FIPS 140

General

Casing	Camera: Aluminum Color: Black NCS S 9000–N
Power	20–28 V DC, max 18.6 W Power over Ethernet IEEE 802.3af/802.3at Type 2 Class 4 Typical 13.1 W, max 25.5 W
Connectors	Shielded RJ45 100BASE-TX/1000BASE-T PoE 3.5 mm mic/line in, 3.5 mm line out DC input Terminal block for 2 configurable inputs/outputs (12 V DC output, max load 50 mA) RS485/RS422 SFP slot (100/1000 Mbps) for SFP fiber module
Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256 bit) Support for recording to dedicated network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*
Operating conditions	0 °C to 45 °C (32 °F to 113 °F) Humidity 10-85% RH (non-condensing)

Storage conditions	–40 °C to 65 °C (–40 °F to 149 °F)
Dimensions	Camera body: 176 x 102 x 75 mm (7 x 4 x 3 in)
Weight	Camera body: 840 g (1.85 lb)
Included accessories	EF mount cover, connector kit, Installation Guide, Windows decoder 1-user license
Optional accessories	Outdoor housing, Axis PoE+ 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/support/downloads*

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*

a. *Supports Axis Lightfinder technology.*
b. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://openssl.org/), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

AXIS®
COMMUNICATIONS