# 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 unprecedented 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

| Models | 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

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|---|---|
| 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)

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

## Video

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| 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

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|---|---|
| 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

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| 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 |
| Supported protocols | IPv4, IPv6 USGv6, HTTP, HTTP/2, HTTPS[b], SSL/TLS[b], QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, LLDP, CDP, MQTT v3.1.1, Syslog |

## System integration

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| 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 S, and ONVIF® Profile T, specification at *onvif.org* |
| Event triggers | Analytics, edge storage events, external input |
| 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 |
| Data streaming | Event data |
| Built-in installation aids | Pixel counter, remote focus |

## Analytics

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| 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* |

## General

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|---|---|
| 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 122 °F) |
| | Humidity 10-85% RH (non-condensing) |
| Storage conditions | -40 °C to 65 °C (-40 °F to 149 °F) |
| Approvals | EMC |
| | EN 55032 Class A, EN 50121-4, EN 55024, EN 61000-6-1, EN 61000-6-2, IEC 62236-4, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A, KCC KN32 Class A, KN35 |
| | Safety |
| | IEC/EN/UL 60950-1, IS 13252 |
| | Network |
| | NIST SP500-267 |
| 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* |

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|---|---|
| **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 |
| **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).*

Environmental responsibility:

*axis.com/environmental-responsibility*

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