AXIS Q16 Network Camera Series
Outstanding image performance in demanding lighting conditions

> HDTV 1080p at 50/60 fps

> Innovative capabilities

> WDR

> Lightfinder technology

> Arctic Temperature Control

AXIS Q16 Network Camera Series comprises indoor and outdoor-ready fixed cameras that deliver outstanding image quality in demanding video surveillance conditions, such as poor or highly variable lighting.

The unique Lightfinder technology makes the cameras extremely sensitive to low light, effectively allowing them to 'see' even in dark conditions. Wide Dynamic Range with 'Dynamic Capture' and 'Forensic Capture' allow to provide homogeneous images, without too dark or too bright parts.

AXIS Q16 Series ranges from Extended D1 resolution cameras to 2-megapixel cameras, with the advantage of HDTV 1080p video at 50/60 frame per second in some models.

Installation is made easy with Power over Ethernet (IEEE 802.3af), which eliminates the need for power cables. The cameras also have a memory card slot for storing recordings locally.

The IP66-rated outdoor-ready cameras operate in temperatures from -40 ºC to 50 ºC (-40 ºF to 122 ºF) using High PoE. They feature Axis' unique Arctic Temperature Control to pre-heat the camera module for securing start up even at very low temperatures following a power failure.

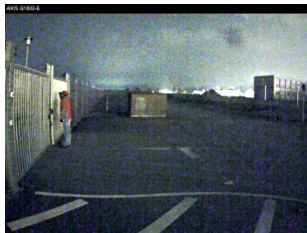*Outdoor-ready models*

HDTV NETWORK VIDEO

Onvif | S

Low-light sensitive and wide dynamic range cameras for indoors and outdoors

The award-winning AXIS Q16 Fixed Network Cameras offer outstanding models supporting WDR-Dynamic Capture and WDR-Forensic Capture capabilities, for surveillance in highly variable lighting conditions, and models supporting Lightfinder technology for environments with poor light conditions. Models supporting high frame rate ensures that quick movements are captured in more details.

Easy installation with innovative capabilities

The focus assistant capability helps setting the focus, which can also be remotely fine tuned with the remote back focus. The pixel counter helps to verify that the pixel resolution of an object fulfills regulatory or customer requirements. The leveling assistance (AXIS Q1614/-E and AXIS Q1615/-E) guides to the correct level during installation; and the auto rotation flips the image to the right orientation, also when Corridor Format is used.

Superior image quality

When light comes through a glass window or entrance, it creates both dark and bright zones. Identification of people or objects becomes critical. With models supporting Wide Dynamic Range - Dynamic Capture no part of the image i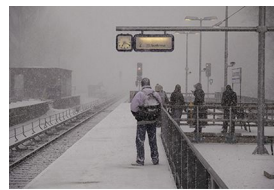s too dark or too bright. Wide Dynamic Range - Forensic Capture , the video is optimized for forensic purposes. Moreover, AXIS Q1615/-E seamlessly transition between handling WDR and low-light conditions. AXIS Q1614/-E and AXIS Q1615/-E deliver smooth and highly detailed video at 50/60 frames per second, helping to identify incidents in fast-paced environments.

AXIS Q1615/-E support Electronic Image Stabilization (EIS) which greatly improves video quality in situations where the camera is subject to vibration and the video, without EIS, would be shaky to view. Hence, the vibration effects are greatly reduced resulting in smoother and steadier video.

AXIS Q1602/-E, AXIS Q1614/-E and AXIS Q1615/-E incorporate Axis' revolutionary Lightfinder technology, resulting in life-like colors in low-light conditions.

For more on WDR, EIS and Lightfinder technology, go to: *www.axis.com/corporate/corp/tech_papers.htm*
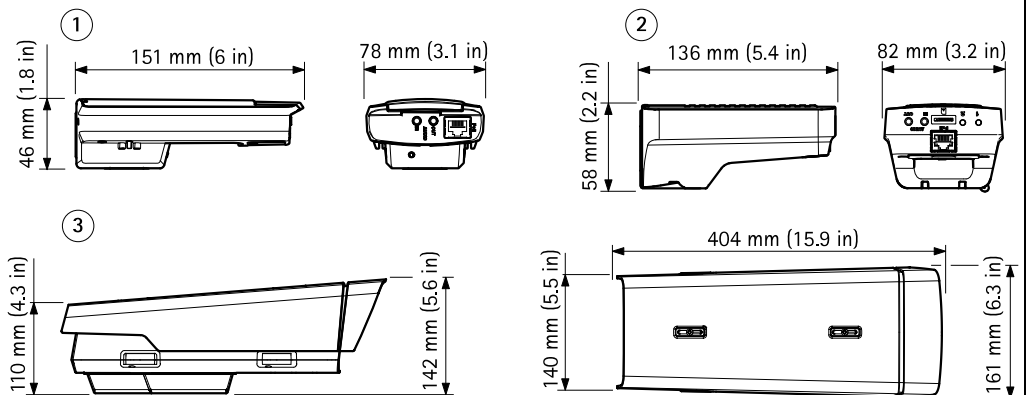
Weather and impact protection

AXIS Q16-E Network Cameras save installation time and costs since they are out-of-the-box-ready for mounting outdoors. The cameras have protection against dust, rain, snow and sunlight (IP66- and NEMA 4X- rated), and protection against impact and vandal acts (IK10-rated). Shock detection with adjustable sensitivity sends an alarm to personnel during attempted vandalism.

Dimensions

1. *AXIS Q1602/Q1604*
2. *AXIS Q1614/Q1615*
3. *AXIS Q16–E*

① 151 mm (6 in) 46 mm (1.8 in) 78 mm (3.1 in)

② 136 mm (5.4 in) 58 mm (2.2 in) 82 mm (3.2 in)

③ 110 mm (4.3 in) 142 mm (5.6 in) 140 mm (5.5 in) 404 mm (15.9 in) 161 mm (6.3 in)

Optional accessories

1. Axis Midspans
2. Lenses
3. Axis Illuminators
4. AXIS T83 Microphones
5. AXIS T98A16-VE Surveillance Cabinet
6. AXIS T91A47 Pole Mounts
7. Axis Mounts
8. Scan for a complete list of accessories
   www.axis.com/products/q16_series/

Technical Specifications - AXIS Q16 Network Camera Series

Models	AXIS Q1602/–E: Extended D1 (768x576), indoor/outdoor AXIS Q1604/–E: 1 MP/HDTV 720p, indoor/outdoor AXIS Q1614/–E: 1 MP/HDTV 720p, indoor/outdoor AXIS Q1615/–E: 2 MP/HDTV 1080p, indoor/outdoor

Camera

Image sensor	Progressive scan RGB CMOS 1/3" AXIS Q1615/–E: Progressive scan RGB CMOS 1/2.8"
Lens	Varifocal, IR corrected, CS-mount, Megapixel resolution AXIS Q1602/–E: DC-iris AXIS Q1604/–E, AXIS Q1614/–E, AXIS Q1615/–E: P-Iris AXIS Q1602/Q1604/Q1614: 2.8–8 mm: 100°–34° view[a], F1.2 AXIS Q1615: 2.8–8 mm: 120°–40° view[a], F1.3 AXIS Q1602-E/Q1604-E/Q1614-E: 2.8–8 mm: 80°–34° view[a], F1.2 AXIS Q1615-E: 2.8–8 mm: 90°–40° view[a], F1.3
Day and night	Automatically removable infrared-cut filter
Minimum illumination	AXIS Q1602/–E: Color: 0.05 lux, F1.2, B/W: 0.008 lux, F1.2 AXIS Q1604/–E: Color: 0.1 lux, F1.2, B/W: 0.02 lux, F1.2 With WDR-Dynamic Capture: Color: 0.4 lux, F1.2, B/W: 0.06 lux, F1.2 AXIS Q1614/–E: Extended D1: Color: 0.05 lux, F1.2, B/W: 0.008 lux, F1.2; HDTV 720p 25/30 fps: Color: 0.1 lux, F1.2, B/W: 0.02 lux, F1.2; With WDR-Dynamic Capture: Color: 0.4 lux, F1.2, B/W: 0.06 lux, F1.2; HDTV 720p 50/60 fps: Color: 0.2 lux, F1.2, B/W: 0.04 lux, F1.2 AXIS Q1615/–E: Color: 0.18 lux, F1.3, B/W: 0.04 lux, F1.3; HDTV 1080p 50/60 fps: Color: 0.36 lux, F1.3, B/W: 0.08 lux, F1.3; HDTV 1080p 25/30 fps with WDR-Forensic Capture: Color: 0.18 lux, F1.3, B/W: 0.04 lux, F1.3
Shutter time	AXIS Q1602/–E, AXIS Q1604/–E: 1/29500 to 2 s AXIS Q1614/–E: 1/43500 to 2 s AXIS Q1615/–E: 1/143000 to 2 s
Pan/Tilt/Zoom	AXIS Q1614/–E, AXIS Q1615/–E: Digital PTZ, Uploadable PTZ driver (Pelco D pre-installed)

Video

Video compression	H.264 (MPEG-4 Part 10/AVC), H.264 Main and Baseline Profile, Motion JPEG AXIS Q1615/–E: High Profile
Resolutions	AXIS Q1602/–E: 768x576 to 160x90 AXIS Q1604/–E: 1280x960[b] (1 MP) to 160x90 AXIS Q1614/–E: HDTV 720p 25/30 fps: 1280x960[b] to 160x90 HDTV 720p 50/60 fps: 1280x720 to 160x90 Extended D1: 768x576 to 160x90 AXIS Q1615/–E:

	WUXGA 25/30 fps (no WDR): 1920x1200 to 160x90 HDTV 1080p 25/30 fps (WDR): 1920x1080 to 160x90 HDTV 1080p 50/60 fps (no WDR): 1920x1080 to 160x90
Frame rate	AXIS Q1602/–E: 30 fps AXIS Q1604/–E: 25/30 fps AXIS Q1614/–E, AXIS Q1615/–E: 50/60 fps (no WDR)
Video streaming	Multiple, individually configurable streams in H.264/Motion JPEG, Controllable frame rate and bandwidth, VBR H.264 AXIS Q1615/–E: MBR H.264
Image settings	Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control, Exposure zone, Backlight compensation, Fine tuning of behavior at low light, Text and image overlay, Privacy mask, Mirroring of images AXIS Q1602/–E: WDR-Dynamic Contrast AXIS Q1604/–E, AXIS Q1614/–E: WDR-Dynamic Capture: Up to 120 dB depending on scene AXIS Q1614/–E: Auto-rotation, Day/Night shift level, Shadow and highlight recovery AXIS Q1615/–E: WDR-Forensic Capture: Up to 120 dB depending on scene, Auto-rotation, Barrel distortion correction, Day/Night shift level, Electronic Image Stabilization (EIS), Local contrast

Audio

Audio streaming	Two-way
Audio compression	AAC LC 8/16 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Configurable bit rate AXIS Q1614/–E, AXIS Q1615/–E: AAC LC 8/16/32 kHz
Audio input/output	External microphone, input or line input, line output AXIS Q1602/Q1604/Q1614/Q1615: Built-in microphone (can be disabled) AXIS Q1614/–E, AXIS Q1615/–E: External balanced/unbalanced microphone or line input, line output

Network

Security	Password protection, IP address filtering, HTTPS[c] encryption, IEEE 802.1X[c] network access control, Digest authentication, User access log
Supported protocols	IPv4/v6, HTTP, HTTPS[c], SSL/TLS[c], QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS

System integration

Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at www.axis.com. AXIS Video Hosting System (AVHS) with One-Click Camera Connection. ONVIF Profile S; specification available at www.onvif.org

Intelligent video	Video motion detection, Active tampering alarm, Audio detection, Support for AXIS Camera Application Platform enabling installation of additional applications
Event triggers	Intelligent video, Edge storage events, External input **AXIS Q1614/–E, AXIS Q1615/–E:** Shock detection
Event actions	File upload: FTP, HTTP, HTTPS, network share and email Notification: email, HTTP, HTTPS and TCP 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 **AXIS Q1604/–E, AXIS Q1614/–E, AXIS Q1615/–E:** Overlay text, Send Video Clip **AXIS Q1614/–E, AXIS Q1615/–E:** Send SNMP Trap
Data streaming	Event data
Built–in installation aids	Focus assistant, Pixel counter, Remote back focus **AXIS Q1614/–E, AXIS Q1615/–E:** Leveling assistant

General

Casing	Camera: Metal (zinc) **AXIS Q1602–E/Q1604–E/Q1614–E/Q1615–E:** IP66- and NEMA 4X-rated, IK10 impact resistant aluminum enclosure Color: White NCS S 1002-B
Memory	256 MB RAM, 128 MB Flash **AXIS Q1615/–E:** 512 MB RAM, 256 MB Flash
Power	**AXIS Q1602/Q1604:** 8–20 V DC or Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3 **AXIS Q1602:** max. 6.5 W, **AXIS Q1604:** max. 6.9 W **AXIS Q1614/Q1615:** 8–28 V DC or Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3, max. 10.8 W **AXIS Q1602–E/Q1604–E/Q1614–E/Q1615–E:** Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3, max. 12.95 W or High PoE max. 25.5 W
Connectors	RJ45 10BASE-T/100BASE-TX PoE, 3.5 mm mic/line in, 3.5 mm line out **AXIS Q1602/Q1604/Q1614/Q1615:** DC input **AXIS Q1602/–E, AXIS Q1604/–E:** Terminal block for 1 alarm input and 1 output **AXIS Q1614/–E, AXIS Q1615/–E:** RS485/RS422, Terminal block for two configurable inputs/outputs (12 V DC output, max. load 50 mA)
Edge storage	Support for recording to dedicated network-attached storage (NAS) **AXIS Q1602/–E, AXIS Q1604/–E:** SD/SDHC/SDXC slot supporting memory card up to 64 GB (card not included)

	AXIS Q1614/–E, AXIS Q1615/–E: microSD/microSDHC/microS-DXC slot supporting memory card up to 64 GB (card not included)
Operating conditions	**AXIS Q1602/Q1604/Q1614:** 0 °C to 50 °C (32 °F to 122 °F) **AXIS Q1615:** 0 °C to 55 °C (32 °F to 131 °F) Humidity 10–85% RH (non-condensing) **AXIS Q1602–E/Q1604–E/Q1614–E/Q1615–E:** -30 °C to 50 °C (-22 °F to 122 °F) with PoE; down to -40 °C (-40 °F) with Axis High PoE midspan, max. 30 W Humidity 10–100% RH (condensing)
Approvals	EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class B, ICES-003 Class B, VCCI Class B, C-tick AS/NZS CISPR 22 Class B, IEC/EN/UL 60950-1 **AXIS Q1602/–E, AXIS Q1604/–E, AXIS Q1614/–E:** KCC KN22 Class B, KN24 **AXIS Q1602–E/Q1604–E/Q1614–E/Q1615–E:** EN 50121-4, IEC 62236–4, IEC/EN/UL 60950-22, IEC/EN 60529 IP66, NEMA 250 Type 4X, IEC 60068-2-6, IEC 60068-2-27, IEC/EN 62262 IK10
Weight	**AXIS Q1602/Q1604:** 600 g (1.3 lb) **AXIS Q1614:** 925 g (2 lb) **AXIS Q1615:** 914 g (2 lb) **AXIS Q1602–E/Q1604–E:** 3100 g (6.8 lb) **AXIS Q1614–E:** 3525 g (7.7 lb) **AXIS Q1615–E:** 3514 g (7.7 lb)
Included accessories	Stand, Connector kit, ResiTorx20 tool, Installation Guide, Installation and Management Software CD, Windows decoder 1-user license **AXIS Q1602–E/Q1604–E/Q1614–E/Q1615–E:** AXIS T94Q01A Wall Mount, Sunshield
Video management software	AXIS Camera Station and video management software from Axis' Application Development Partners (not included). For more information, see: *www.axis.com/products/video/software*
Warranty	Axis 3–year warranty and AXIS Extended Warranty option, see *www.axis.com/warranty*

a. *Horizontal angle of view*
b. *1400x1050 (1.4 MP) scaled resolution available via VAPIX®*
c. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

More information is available at www.axis.com

AXIS ®
C O M M U N I C A T I O N S