

AXIS Q8685-E PTZ Network Camera

For unobstructed view and details

AXIS Q8685-E is a highly responsive and reliable positioning camera, designed for continuous and jerk-free pan/tilt movements (360° endless and 135° from ground to sky). When column-mounted, it enables a 360° unobstructed field of view. AXIS Q8685-E provides HDTV 1080p video quality, 30x zoom, WDR - forensic capture, focus recall and Zipstream. It features both RJ45 and SFP interfaces, enabling a long-distance fiber connection with a failover network link. Capable of operating in extreme temperatures, withstanding hurricane-strength winds and including an integrated long-life wiper removing raindrops, dirt and grime, AXIS Q8685-E is ideal for a wide range of adverse environmental conditions.

- > **Responsive positioning with 360° endless pan and 135° tilt from ground to sky**
- > **Forensic details and focus recall**
- > **Long-distance network connection**
- > **Weather protection with remote maintenance (rain and dirt)**
- > **Easy to install**



AXIS Q8685-E PTZ Network Camera

Models	AXIS Q8685-E 20-28 V AC/DC
Camera	
Image sensor	1/2.8" progressive scan CMOS
Lens	Varifocal, 4.3–129 mm, F1.6–4.7 Horizontal field of view: 65.6°–2.0° Vertical field of view: 39.0°–1.2° Autofocus, auto-iris
Day and night	Automatically removable infrared-cut filter in night mode
Minimum illumination	Color: 0.2 lux at 30 IRE F1.6 B/W: 0.01 lux at 30 IRE F1.6 Color: 0.25 lux at 50 IRE F1.6 B/W: 0.02 lux at 50 IRE F1.6
Shutter time	1/66500 to 2 s
Pan/Tilt/Zoom	Pan: 360° endless, 0.05°/s to 120°/s Tilt (default): -90° to +45° Tilt (inverted ^g): -45° to +90° Tilt speed: 0.05°/s to 60°/s Jerk-free movements at low speed: ±0.01°/s (at 0.05°/s) Zoom: 30x optical zoom, 12x digital zoom, total 360x zoom Preset accuracy: 0.05° 256 preset positions, guard tour, control queue, on-screen directional indicator, focus window, speed zoom, focus recall, de-icing control ^b , dynamic load balancing ^c
Video	
Video compression	H.264 (MPEG-4 Part 10/AVC), Baseline, Main and High Profiles Motion JPEG
Resolution	1920x1080 (HDTV 1080p) to 320x180
Frame rate	Up to 25/30 fps (50/60 Hz) in 1080p Up to 50/60 fps (50/60 Hz) in 720p
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Axis Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/MBR H.264
Image settings	Compression, color, brightness, sharpness, contrast, local contrast, white balance, exposure control, exposure zones, WDR - forensic capture (up to 120 dB), automatic backlight compensation, fine tuning of low-light behavior, manual shutter time, text and image overlay, 20 individual 3D privacy masks, image freeze on PTZ, electronic image stabilization
Network	
Security	Password protection, IP address filtering, HTTPS ^d encryption, network failover mode ^f , IEEE 802.1X ^d network access control, digest authentication, user access log, centralized certificate management
Supported protocols	IPv4/v6, HTTP, HTTPS ^d , SSL/TLS ^d , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP TM , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, Axis APTP A
System integration	
Application Programming Interface	Open API for software integration, including VAPIX [®] and AXIS Camera Application Platform, specifications at www.axis.com ONVIF [®] Profile S and ONVIF [®] Profile G, specification at www.onvif.org
Analytics	Included AXIS Video Motion Detection, Shock Detection, Advanced Gatekeeper Supported AXIS Perimeter Defender, AXIS Cross Line Detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see www.axis.com/acap
Event triggers	Detectors: live stream accessed, video motion detection, shock detection, day/night mode Hardware: network, temperature Input signal: digital input, manual trigger, virtual inputs PTZ: autotracking, moving, preset reached, ready Storage: disruption, recording System: system ready

	Time: recurrence, use schedule
Event actions	Day/night mode, overlay text, video recording to edge storage, pre- and post-alarm video buffering, external output activation, send SNMP trap, illumination, WDR mode, wiper sequence, washer sequence PTZ control: preset position, guard tour, autotracking File upload: FTP, HTTP, HTTPS, SFTP, network share, email Notification: HTTP, HTTPS, TCP, email
Data streaming	Event data
Built-in installation aids	Pixel counter
General	
Casing	IP66-, and NEMA 4X-rated powder coated aluminum Color: white NCS S 1002-B Front window: tempered glass with anti-reflective coating Long-life silicone wiper Sunshield: high-impact UV-stabilized thermoplastic
Sustainability	PVC free
Memory	512 MB RAM, 256 MB Flash
Power	20–28 V AC/DC Typical: 16 W Max: 204 W Power loss recovery ^e TVS 2 kV surge protection
I/O connector	Output voltage: 12 V DC Max load: 50 mA
Connectors	SFP slot (SFP module not included) ^f RJ45 10BASE-T/100BASE-TX/1000BASE-T network connector ^f Power connector I/O connector: 6-pin terminal block with 4 configurable inputs/outputs
Storage	Support for SD/SDHC/SDXC card Support for SD card encryption Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see www.axis.com
Operating conditions	Normal: -50 °C to 55 °C (-58 °F to 131 °F) Maximum (intermittent): 65 °C (149 °F) Arctic Temperature Control: start-up at -40 °C (-40 °F) Humidity 10–100% RH (condensing) Wind load when PTZ operational 47 m/s (106 mph), without sunshield > 60 m/s (135 mph) ^g Maximum effective projected area (EPA): 0.119 m ²
Storage conditions	-40 °C to 70 °C (-40 °F to 158 °F)
Approvals	EMC EN 55032 Class A, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, VCCI Class A ITE, ICES-003 Class A, RCM AS/NZS CISPR 32 Class A, EN 50121-4, IEC 62236-4 Safety IEC/EN/UL 62368-1, IEC/EN/UL 60950-22 Environment IEC/EN 60529 IP66, IEC 62262 IK10 ^h , NEMA 250 Type 4x, ISO 4892-2, IEC 60068-2-6, IEC 60068-2-27
Dimensions	229 x 411 x 580 mm (9 x 16 x 23 in) Maximum height with 45° tilt upwards: 680 mm (27 in) Maximum width/depth with 360° pan clearance: 633 mm (25 in)
Weight	14 kg (31 lb)
Included accessories	Installation Guide Windows decoder 1-user license Power connector, I/O connector Torx [®] bits T20 and T30
Optional accessories	AXIS T94J01A Wall Mount AXIS T94N01G Pole Mount AXIS T95A64 Corner Bracket AXIS Washer Kit B AXIS Cable 24 V DC/24–240 V AC 22 m ⁱ AXIS T8611 SFP Module LC.LX AXIS T8612 SFP Module LC.SX AXIS T8613 SFP Module 1000BASE-T AXIS T99 Illuminator Bracket Kit A Power supply DIN PS24 480 W

	For more accessories, see www.axis.com
Video management software	AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available on www.axis.com/techsup/software
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese
Warranty	Axis 3-year warranty and AXIS Extended Warranty option, see www.axis.com/warranty

- a. The camera housing can be mounted in an inverted configuration if tilting directly upwards is preferred.
- b. Internal heaters to defrost ice build-up, activated by HTTP API (VAPIX).
- c. Pan and tilt motors actively compensate for changes in load conditions induced by external forces such as high winds. This allows minimum power consumption at low wind.

- d. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (eyay@cryptsoft.com).
- e. Memory of all IP data and home position retained, and guard tour and other events resumed.
- f. If the network link is established via both the SFP and RJ45 connectors, the former acts as the primary link and the latter as the failover link.
- g. The values shown are based on results from actual wind tunnel testing. The maximum wind load when the unit is stationary is not known due to wind speed limit of 60 m/s (135 mph) at the test lab. For drag force calculations, use maximum effective projected area (EPA).
- h. Excluding front window.
- i. When using the 22 m (72 ft) AXIS Cable 24 V DC/24–240 V AC, a power supply capable of delivering 400 W is required to compensate for the power loss in the cable.

Environmental responsibility:

axis.com/environmental-responsibility