

## AXIS Q8685-LE PTZ Network Camera

For unobstructed view and details day and night

AXIS Q8685-LE is a highly responsive and reliable positioning camera including long-range IR illumination (up to 500 meters/1640 feet without lens). Optical IR-cut and IR-pass filters produce superior image quality even in challenging mixed-light. Designed for continuous and jerk-free pan/tilt movements. When column-mounted, enables a 360° unobstructed view. Provides HDTV 1080p, 30x zoom, WDR - forensic capture, focus recall and Zipstream. Features both RJ45 and SFP interfaces, enabling long-distance fiber connection with a failover network link. Operating in extreme temperatures, withstanding hurricane-strength winds and including an integrated long-life wiper removing raindrops, dirt and grime, AXIS Q8685-LE is ideal for adverse environments.

- > **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-LE PTZ Network Camera

<b>Models</b>	AXIS Q8685-LE 20-28 V AC/DC
<b>Camera</b>	
<b>Image sensor</b>	1/2.8" progressive scan CMOS
<b>Lens</b>	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
<b>Day and night</b>	Automatic switching from infrared-cut filter to infrared pass filter in night mode
<b>Minimum illumination</b>	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 B/W: 0 lux with IR illumination
<b>Shutter speed</b>	1/66500 to 2 s
<b>Pan/Tilt/Zoom</b>	Pan: 360° endless, 0.05°/s to 120°/s Tilt (default): -90° to +45° Tilt (inverted <sup>g</sup> ): -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 <sup>b</sup> , dynamic load balancing <sup>c</sup>
<b>Video</b>	
<b>Video compression</b>	H.264 (MPEG-4 Part 10/AVC), Baseline, Main and High Profiles Motion JPEG
<b>Resolution</b>	1920x1080 (HDTV 1080p) to 320x180
<b>Frame rate</b>	Up to 25/30 fps (50/60 Hz) in 1080p Up to 50/60 fps (50/60 Hz) in 720p
<b>Video streaming</b>	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
<b>Image settings</b>	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
<b>Network</b>	
<b>Security</b>	Password protection, IP address filtering, HTTPS <sup>d</sup> encryption, network failover mode <sup>f</sup> , IEEE 802.1X <sup>d</sup> network access control, digest authentication, user access log, centralized certificate management
<b>Supported protocols</b>	IPv4/v6, HTTP, HTTPS <sup>d</sup> , SSL/TLS <sup>d</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>TM</sup> , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTCIP, NTP, RTSP, RTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, Axis APTP A
<b>System integration</b>	
<b>Application Programming Interface</b>	Open API for software integration, including VAPIX <sup>®</sup> and AXIS Camera Application Platform, specifications at <a href="http://www.axis.com">www.axis.com</a> ONVIF <sup>®</sup> Profile S and ONVIF <sup>®</sup> Profile G, specification at <a href="http://www.onvif.org">www.onvif.org</a>
<b>Event actions</b>	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
<b>Event triggers</b>	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
<b>Data streaming</b>	Event data
<b>Built-in installation aids</b>	Pixel counter
<b>Analytics</b>	
<b>Applications</b>	<b>Included</b> AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, Shock Detection, advanced gatekeeper <b>Supported</b> AXIS Cross Line Detection 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 <a href="http://axis.com/acap">axis.com/acap</a>
<b>General</b>	
<b>Casing</b>	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
<b>Sustainability</b>	PVC free
<b>Memory</b>	512 MB RAM, 256 MB Flash
<b>Power</b>	20-28 V AC/DC Typical: 16 W (without illumination), 64 W (with illumination) Max: 204 W (without illumination), 300 W (with illumination) Power loss recovery <sup>e</sup> TVS 2 kV surge protection <b>I/O connector</b> Output voltage: 12 V DC Max load: 50 mA
<b>Connectors</b>	SFP slot (SFP module not included) <sup>f</sup> RJ45 10BASE-T/100BASE-TX network connector <sup>f</sup> Power connector I/O connector: 6-pin terminal block with 4 configurable inputs/outputs
<b>IR illumination</b>	<b>Distance</b> Without diverging lenses 10° x 10°: 500 m (1640 ft) With diverging lenses 35° x 10°: 240 m (787 ft) <sup>g</sup> With diverging lenses 60° x 25°: 135 m (443 ft) With diverging lenses 80° x 30°: 100 m (328 ft) With diverging lenses 120° x 50°: 65 m (213 ft) <sup>h</sup> Power: 96 W Wavelength: 850 nm Illumination intensity adjustable during installation Illumination synchronized with day/night mode
<b>Storage</b>	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 <a href="http://www.axis.com">www.axis.com</a>
<b>Operating conditions</b>	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) <b>Wind load when PTZ operational</b> 52 m/s (117 mph), without sunshield 60 m/s (135 mph) <sup>i</sup> Maximum effective projected area (EPA): 0.164 m <sup>2</sup>
<b>Storage conditions</b>	-40 °C to 70 °C (-40 °F to 158 °F)
<b>Approvals</b>	<b>EMC</b> 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, KC KN32 Class A, KC KN35 <b>Safety</b> IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IEC/EN 60598-1, IEC/EN 62471 (risk group 2), IS 13252 <b>Environment</b> IEC/EN 60529 IP66, IEC 62262 IK10 <sup>j</sup> , NEMA 250 Type 4x, ISO 4892-2, IEC 60068-2-6, IEC 60068-2-27
<b>Dimensions</b>	495 x 411 x 580 mm (19 x 16 x 23 in) <sup>k</sup>

	Maximum height with 45° tilt upwards: 680 mm (27 in) Maximum width/depth with 360° pan clearance: 633 mm (25 in)
<b>Weight</b>	18.4 kg (41 lb) <sup>k</sup>
<b>Included accessories</b>	Installation Guide Windows decoder 1-user license AXIS PT IR Illuminator Kit C Power connector, I/O connector Torx® bits T20 and T30
<b>Optional accessories</b>	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 <sup>l</sup> AXIS T8611 SFP Module LC.LX AXIS T8612 SFP Module LC.SX AXIS T8613 SFP Module 1000BASE-T Power supply DIN PS24 480 W For more accessories, see <a href="http://www.axis.com">www.axis.com</a>
<b>Video management software</b>	AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available on <a href="http://www.axis.com/techsup/software">www.axis.com/techsup/software</a>
<b>Languages</b>	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese
<b>Warranty</b>	5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>

- 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](http://www.openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@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. 35° diverging lenses installed.
- h. 120° diverging lenses as optional accessory.
- i. 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).
- j. Excluding front window and illuminators.
- k. With AXIS PT IR Illuminator Kit C.
- l. 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](http://axis.com/environmental-responsibility)