AXIS COMMUNICATIONS

AXIS Q1700-LE License Plate Camera
Dedicated camera for sharp images at high speeds

AXIS Q1700-LE License Plate Camera delivers clear and sharp license plate images from vehicles moving at speeds of up to 130 km/h (81 mph) day and night. Thanks to a built-in license plate capture assistant, the camera is easy to setup and image settings are automatically adjusted to fit speed, installation height and vehicle distance in a specific traffic scene. A robust design ensures reliable operation in extreme weather conditions and in wind forces up to hurricane level. The camera is designed for usage with third-party edge or server-based software to perform license plate recognition and trigger actions.

> Sharp license plates in HDTV 1080p / 2 MP
> OptimizedIR range up to 50 m (164 ft)
> 8x optical zoom
> Horizontal field of view of 16° - 2.3°
> Designed for third-party software

ONVIF® | GS

HDTV
NETWORK VIDEO

AXIS Q1700-LE License Plate Camera

Camera

Image sensor	1/2.8" progressive scan RGB CMOS
Lens	18–137 mm, F2.9–4.1 Horizontal field of view: 16°–2.3° Vertical field of view: 9.6°–1.3° Installation focus, auto-iris, automatic day/night Thread for 62 mm filters, max filter thickness: 5 mm
Day and night	Automatically removable infrared-cut filter in day mode and infrared-pass filter 720 nm in night mode
Minimum illumination	**Color:** 0.16 lux at 50 IRE F1.4 **B/W:** 0.03 lux at 50 IRE F1.4, 0 lux with IR illumination on
Shutter time	1/66500 s to 1 s

License Plate Capture

Detection range	**Day**: 20–100 m (66–328 ft) **Night**: 20–50 m (66–164 ft) Night detection range up to 100 m (328 ft) with optional accessory AXIS T90D20 IR-LED Illuminator
IR illumination	OptimizedIR with power-efficient, long-life 850 nm IR LED's with adjustable angle of illumination and intensity. Range of reach 40 m (131 ft) in wide field of view and 50 m (164 ft) in full tele view, or more depending on the scene
Vehicle speed	Up to 130 km/h (81 mph) with optional edge analytics Up to 250 km/h (155 mph) with server based analytics
Coverage	Single lane with optional edge analytics Two lanes with server based analytics
Installation	Mounting height: Up to 10 m (33 ft) Distance from road: Up to 10 m (33 ft) Camera detects tilt and roll angle automatically Built-in licence plate capture assistant optimizes video settings based on mounting height, distance to vehicle, and expected vehicle speed

Video

Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolution	1920x1080 HDTV 1080p to 160x120 **Maximum pixel density with 8x optical zoom:** **25 m (82 ft):** 1912 px/m **50 m (164 ft):** 956 px/m **250 m (820 ft):** 191 px/m
Frame rate	**With WDR:** Up to 25/30 fps (50/60 Hz) in all resolutions **Without WDR:** Up to 50/60 fps (50/60 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Axis Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/ABR/MBR H.264
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: Up to 120 dB depending on scene, defogging, white balance, day/night threshold, exposure mode, exposure zones, compression, mirroring of images, electronic image stabilization, barrel distortion correction, text and image overlay, dynamic text and image overlay, privacy masks Rotation: auto, 0°, 180° Scene profiles: license plate, forensic, vivid, traffic overview
Pan/Tilt/Zoom	8x optical zoom, preset positions

Audio

Audio streaming	Audio in, simplex
Audio compression	AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz, LPCM Configurable bit rate

Network

Security	Password protection, IP address filtering, HTTPS[a] encryption, IEEE 802.1x (EAP-TLS)[a] network access control, digest authentication, user access log, centralized certificate management Brute force delay protection
Supported protocols	IPv4, IPv6 USGv6, HTTP, HTTPS[a], SSL/TLS[a], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SRTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, LLDP

System integration

Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com* AXIS Guardian with One-Click Connection ONVIF® Profile S and ONVIF® Profile G, specification at *onvif.org*
Analytics	Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*
Event triggers	Analytics, edge storage events Supervised external input, virtual inputs through API, shock detection
Event actions	Pre- and post-alarm video buffering File upload: FTP, SFTP, HTTP, HTTPS, network share and email Notification: email, HTTP, HTTPS, TCP and SNMP trap
Data streaming	Event data
Built-in installation aids	License plate capture assistant, remote zoom, pixel counter, leveling assistant, autorotation

General

Casing	IP66- and NEMA 4X-rated, IK10 impact-resistant aluminum enclosure with integrated dehumidifying membrane, IK08 impact-resistant glass front window, weathershield with black anti-glare coating Wind survivability 60 m/s (134 mph) Color: Dark Gray NCS S 5502-B (Weathershield: Black)
Sustainability	PVC free, 5% recycled plastic
Memory	1024 MB RAM, 512 MB Flash
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 7.7 W, max 12.95 W 20–28 V DC, typical 7.8 W, max 13.5 W 20–24 V AC, typical 12.4 V A, max 20 V A
Connectors	Shielded RJ45 10BASE-T/100BASE-TX PoE IDC punchdown connector DC Power connector Terminal block for two configurable supervised inputs / digital outputs (12 V DC output, max. load 50 mA) 3.5 mm mic/line in
IR illumination	OptimizedIR with power-efficient, long-life 850 nm IR LED's with adjustable angle of illumination and intensity. Range of reach 40 m (131 ft) in wide field of view and 50 m (164 ft) in full tele view, or more depending on the scene
Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*
Operating conditions	-40 °C to 60 °C (-40 °F to 140 °F) Humidity 10-100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F)
Approvals	**EMC** EN 55032 Class A, EN 50121-4, IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2, 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, EAC **Safety** IEC/EN/UL 62368-1, IEC/EN/UL 60950-22 IS 13252 **Environment** EN 50581, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP66, IEC/EN 62262 IK10 body, IK08 glass, NEMA 250 Type 4X, NEMA TS 2 (Subsection 2.2.7-2.2.9) **Network** NIST SP500–267 **Other** EN/IEC 62471
Dimensions	Length: 439 mm (17.3 in)

	ø 147 mm (5.8 in)
Weight	2.4 kg (5.3 lb)
Included accessories	Installation Guide, Windows® decoder 1-user license, connector kit, Resistorx® L-key RJ45 patch cable
Optional accessories	AXIS T90D20 IR-LED Illuminator - for night time capture range at up to 100 m (328 ft) AXIS T8604 Media Converter Switch AXIS T91A47 Pole Mount, AXIS T94P01B Corner Bracket 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/vms*

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 *axis.com/warranty*

a. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

Environmental responsibility:

axis.com/environmental-responsibility

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