

## **AXIS Q.1645-LE** High-speed video with 1/2" sensor and OptimizedIR

With AXIS Q1645-LE Network Camera it's easier than ever to capture details even in challenging lighting or low light. With a 1/2" sensor and i-CS lens, AXIS Q1645-LE ensures high-resolution images at up to 120 fps and provides superior light sensitivity with Forensic WDR and Lightfinder. The robust aluminum housing resists extreme temperatures, and comes with built-in IR LED illumination for surveillance in complete darkness. AXIS Q1645-LE enables proactive surveillance with pre-installed AXIS Guard Suite and orientation aid for quick orientation with multiple monitors. Zipstream optimizes the video stream to maintain high video quality while saving bandwidth and storage.

- > 2 MP resolution at up to 100/120 fps
- > 1/2" sensor
- > Forensic WDR and Lightfinder
- > Electronic image stabilization (EIS)
- > AXIS Motion Guard, AXIS Fence Guard and AXIS Loitering Guard









## AXIS Q1645-LE

| Camera                    |   |
|---------------------------|---|
| Image sensor              | 1/2" progressive scan RGB CMOS  |
| Lens                      | Varifocal, IR corrected, CS-mount   |
| Lens                      | 3.9–10.0 mm, F1.5   |
|                           | 2 MP (16:9):<br>Horizontal field of view: 92°–42°   |
|                           | Vertical field of view: 50°–23°   |
|                           | i-CS lens   |
| Day and night             | Automatically removable infrared-cut filter   |
| Minimum                   | 1080p 25/30 fps with WDR and Lightfinder:   |
| illumination              | Color: 0.05 lux, at 50 IRE F1.5, B/W: 0.01 lux, at 50 IRE F1.5<br>1080p 50/60 fps with WDR and Lightfinder:                             |
|                           | Color: 0.1 lux, at 50 IRE F1.5, B/W: 0.02 lux, at 50 IRE F1.5   |
|                           | 1080p 100/120 fps:<br>Color: 0.2 lux, at 50 IRE F1.5, B/W: 0.04 lux, at 50 IRE F1.5   |
|                           | 1080p 25/30 fps with WDR and Lightfinder:   |
|                           | Color: 0.02 lux, at 50 IRE F0.9, B/W: 0.004 lux, at 50 IRE F0.9   |
| Shutter time              | 1/100000 to 2 s   |
| Pan/Tilt/Zoom             | Digital PTZ, uploadable PTZ driver (Pelco D pre-installed)  |
| Video                     |   |
| Video                     | H.264 (MPEG-4 Part 10/AVC), Main, Baseline and High Profile   |
| compression<br>Resolution | Motion JPEG<br>1920x1080 to 320x180   |
| Frame rate                |   |
| i fame fale               | HDTV 1080p (1920x1080) with WDR:<br>Up to 50/60 fps with power line frequency 50/60 Hz  |
|                           | HDTV 1080p (1920x1080) without WDR:   |
|                           | Up to 100/120 fps with power line frequency 50/60 Hz  |
| Video streaming           | Multiple, individually configurable streams in H.264 and Motion JPEG  |
|                           | Axis Zipstream technology in H.264  |
|                           | Controllable frame rate and bandwidth<br>VBR/MBR H.264  |
| Image settings            | Saturation, contrast, brightness, sharpness, Forensic WDR –   |
| 5 5                       | 120 dB, white balance, day/night threshold, exposure mode,  |
|                           | exposure zones, compression, orientation: auto, 0°, 90°, 180°, 270°, mirroring of images, dynamic text overlay, image overlay,          |
|                           | privacy masks, defogging, noise reduction, electronic image   |
|                           | stabilization, barrel distortion correction, orientation aid, fine<br>tuning of behavior at low light                                   |
|                           | Scene profiles: forensic, vivid, traffic overview   |
| Audio                     |   |
| Audio streaming           | Тwo-way   |
| Audio                     | AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz,  |
| compression               | Opus 8/16/48 kHz<br>Configurable bit rate   |
| Audio                     | External balanced/unbalanced microphone or line input, line   |
| input/output              | output  |
|                           | 24 bit AD/DA-conversion   |
| Network                   | Password protection, IP address filtering, HTTPS <sup>a</sup> encryption,   |
| Security                  | IEEE 802.1X <sup>a</sup> network access control, Digest authentication, User  |
|                           | access log, Centralized Certificate Management  |
| Supported                 | IPv4/v6, HTTP, HTTPS <sup>a</sup> , SSL/TLS <sup>a</sup> , QoS Layer 3 DiffServ, FTP,   |
| protocols                 | CIFS/SMB, SMTP, Bonjour, UPnP <sup>TM</sup> , SNMPv1/v2c/v3 (MIB-II),<br>DNS, DynDNS, NTP, RTSP, RTP, SFTP, SRTP, TCP, UDP, IGMP, RTCP, |
|                           | ICMP, DHCP, ARP, SOCKS, SSH, LLDP   |
| System integro            | tion  |
| Application               | Open API for software integration, including VAPIX® and   |
| Programming<br>Interface  | AXIS Camera Application Platform; specifications at axis.com<br>AXIS Video Hosting System (AVHS) with One-Click Connection              |
|                           | ONVIF Profile S and ONVIF Profile G, specifications at <i>onvif.org</i>   |
| Analytics                 | Included  |
|                           | AXIS Video Motion Detection, AXIS Fence Guard,<br>AXIS Motion Guard, AXIS Loitering Guard, active tampering                             |
|                           | alarm, audio detection  |
|                           | Supported<br>AXIS Digital Autotracking, AXIS Perimeter Defender   |
|                           | AXIS Digital Autotracking, AXIS Perimeter Defender  |
|                           |   |

|                               | Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap   |
|-------------------------------|---|
| Event triggers                | Analytics, external input, edge storage events<br>Detectors: live stream accessed, video motion detection, audio<br>detection, shock detection<br>Hardware: network, temperature<br>Input Signal: manual trigger, virtual inputs<br>PTZ: error, moving, preset reached, ready<br>Storage: disruption, recording<br>System: system ready<br>Time: recurrence, use schedule   |
| Event actions                 | File upload: FTP, SFTP, HTTP, HTTPS, network share and email,<br>send video clip<br>Notification: email, HTTP, HTTPS and TCP<br>Overlay text, Send SNMP Trap<br>Video and audio recording to edge storage<br>Pre- and post-alarm video buffering<br>External output activation, day/night vision mode, play audio clip,<br>status LED, WDR mode, Defog mode, PTZ control  |
| Data streaming                | Event data  |
| Built-in<br>installation aids | i-CS: Remote zoom and focus<br>Other lens: Remote back focus<br>Traffic wizard, pixel counter, levelling assistant, autorotation  |
| General                       |   |
| Casing                        | IP66-, IP67-, NEMA 4X- and IK10-rated<br>Metal (Aluminium)<br>Color front: Black - NCS S 9000-N<br>Color chassi: White - NCS S 1002-B   |
| Sustainability                | PVC free  |
| Memory                        | 1 GB RAM, 512 MB Flash  |
| Power                         | Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4<br>Typical 12.3 W, max 25.5 W   |
| Connectors                    | RJ45 10BASE-T/100BASE-TX PoE<br>I/0: 6-pin 2.5 mm terminal block for four configurable<br>inputs/outputs (12 V DC output, max load 50 mA)<br>RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block<br>3.5 mm mic/line in, 3.5 mm line out<br>i-CS connector (compatible with P-Iris and DC-iris)   |
| IR illumination               | OptimizedIR with power-efficient, long-life 850 nm IR LEDs<br>Range of reach 30 m (98 ft) or more depending on the scene  |
| Storage                       | Support for microSD/microSDHC/microSDXC card<br>Support for SD card encryption<br>Support for recording to network-attached storage (NAS)<br>For SD card and NAS recommendations see <i>axis.com</i>  |
| Operating<br>conditions       | Arctic temperature control:<br>Start-up at -40 °C to 60 °C (-40 °F to 140 °F)<br>Humidity 10-100% RH (condensing)   |
| Storage conditions            | -40 °C to 65 °C (-40 °F to 149 °F)  |
| Approvals                     | EMC<br>EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, EN 50121-4,<br>IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2,<br>FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A,<br>RCM AS/NZS CISPR 32 Class A<br>Safety<br>IEC/EN/UL 60950-22, IEC/EN/UL 62368-1<br>Environment<br>IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14,<br>IEC 60068-2-3, IEC 60068-2-7, IEC 60068-2-6, IEC 60068-2-14, |
|                               | IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP66/67,<br>IEC/EN 62262 IK10, NEMA 250 Type 4X<br>Other<br>IEC 62471  |
| Dimensions                    | 178 x 206 x 494 mm (7 x 8.11 x 19.45 in)  |
| Weight                        | 6350 g (13.2 lb)  |
| Included<br>accessories       | AXIS T94Q01A Wall Mount, AXIS T92G20 Outdoor Housing,<br>connector kit, resistorx® T20 tool, installation guide, Windows<br>decoder 1-user license  |
| Optional<br>accessories       | AXIS T90B Illuminators, Axis network cable couplers,<br>AXIS T8129 PoE Extender, AXIS T8415 Wireless Installation Tool,<br>Axis midspans  |

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

www.axis.com/environmental-responsibility

