

# AXIS Q1645 Network Camera

High-speed video with 1/2" sensor and i-CS lens

With AXIS Q1645 Network Camera it's easier than ever to capture details even in challenging lighting or low light. The 1/2" sensor and i-CS lens ensure sharp images in high resolution at full frame rate, and with Forensic WDR and Lightfinder, AXIS Q1645 provides superior light sensitivity and excellent image usability. AXIS Q1645 enables proactive surveillance with preinstalled AXIS Motion Guard and AXIS Fence Guard, and orientation aid with compass rose and street names for quick orientation with multiple monitors. Zipstream optimizes the video stream to maintain high video quality while saving bandwidth and storage.

- > **HDTV 1080p/2 MP resolution at up to 100/120 fps**
- > **1/2" sensor**
- > **Forensic WDR and Lightfinder**
- > **Electronic image stabilization (EIS)**
- > **AXIS Motion Guard and AXIS Fence Guard**



# AXIS Q1645 Network Camera

| Camera                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | AXIS Digital Autotracking, AXIS Perimeter Defender<br>Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="https://axis.com/acap">axis.com/acap</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Image sensor                      | 1/2" progressive scan RGB CMOS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Event triggers</b><br>Analytics, external input, edge storage events<br>Detectors: live stream accessed, video motion detection, audio 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Lens                              | Varifocal, IR corrected, CS-mount<br>3.9–10.0 mm, F1.5<br><b>2 MP (16:9):</b><br>Horizontal field of view: 109°–42°<br>Vertical field of view: 58°–23°<br>i-CS lens                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Day and night                     | Automatically removable infrared-cut filter                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Minimum illumination              | <b>1080p 25/30 fps with WDR and Lightfinder:</b><br>Color: 0.05 lux, at 50 IRE F1.5, B/W: 0.01 lux, at 50 IRE F1.5<br><b>1080p 50/60 fps with WDR and Lightfinder:</b><br>Color: 0.1 lux, at 50 IRE F1.5, B/W: 0.02 lux, at 50 IRE F1.5<br><b>1080p 100/120 fps:</b><br>Color: 0.2 lux, at 50 IRE F1.5, B/W: 0.04 lux, at 50 IRE F1.5<br><b>1080p 25/30 fps with WDR and Lightfinder:</b><br>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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Event actions</b><br>File upload: FTP, SFTP, HTTP, HTTPS, network share and email, 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, status LED, WDR mode, defog mode, PTZ control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Pan/Tilt/Zoom                     | Digital PTZ, uploadable PTZ driver (Pelco D pre-installed)                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Video                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Video compression                 | H.264 (MPEG-4 Part 10/AVC), Main, Baseline and High Profile Motion JPEG                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Resolution                        | 1920x1080 to 320x180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Data streaming</b> Event data<br><b>Built-in installation aids</b> i-CS: Remote zoom and focus<br>Other lens: Remote back focus<br>Traffic wizard, pixel counter, levelling assistant, autorotation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Frame rate                        | <b>HDTV 1080p (1920x1080) with WDR:</b><br>Up to 50/60 fps with power line frequency 50/60 Hz<br><b>HDTV 1080p (1920x1080) without WDR:</b><br>Up to 100/120 fps with power line frequency 50/60 Hz                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Video streaming                   | Multiple, individually configurable streams in H.264 and Motion JPEG<br>Axis Zipstream technology in H.264<br>Controllable frame rate and bandwidth<br>VBR/ABR/MBR H.264                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Image settings                    | Saturation, contrast, brightness, sharpness, Forensic WDR – 120 dB, white balance, day/night threshold, exposure mode, exposure zones, compression, orientation: auto, 0°, 90°, 180°, 270° including corridor format, mirroring of images, dynamic text overlay, image overlay, privacy masks, defogging, noise reduction, electronic image stabilization, barrel distortion correction, orientation aid, fine tuning of behavior at low light<br>Scene profiles: forensic, vivid, traffic overview, backlit entrance |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Audio                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>General</b><br><b>Casing</b> Metal (zinc)<br>Color lid: Silver – RAL 9006<br>Color chassis: Black – NCS S 9000-N<br><b>Sustainability</b> PVC free<br><b>Memory</b> 1 GB RAM, 512 MB Flash<br><b>Power</b> Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3<br>Typical 4.5 W, max 9.1 W<br>8–28 V DC, typical 4.3 W, max 9.5 W<br><b>Connectors</b> Shielded RJ45 10BASE-T/100BASE-TX PoE<br>I/O: 6-pin 2.5 mm terminal block for four configurable 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)<br><b>Storage</b> 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 <a href="https://axis.com">axis.com</a><br><b>Operating conditions</b> –20 °C to 60 °C (–4 °F to 140 °F)<br>Humidity 10–85% RH (non-condensing)<br><b>Storage conditions</b> –40 °C to 65 °C (–40 °F to 149 °F)<br>Humidity 5–95% RH (non-condensing)<br><b>Approvals</b> EMC<br>EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, 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<br><b>Safety</b> IEC/EN/UL 62368-1, IS 13252<br><b>Environment</b> IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78<br><b>Network</b> NIST SP500-267 |
| Audio streaming                   | Two-way                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Audio compression                 | AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz<br>Configurable bit rate                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Audio input/output                | External balanced/unbalanced microphone or line input, line output<br>24 bit AD/DA-conversion                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Network                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Dimensions</b> 82 x 66 x 210 mm (3.23 x 2.60 x 8.25 in)<br><b>Weight</b> 950 g (2.1 lb)<br><b>Included accessories</b> Stand, connector kit, resistorx® T20 tool, installation guide, Windows® decoder 1-user license<br><b>Optional accessories</b> AXIS T90B Illuminators, AXIS T92G Housings, AXIS T93F Housings, Axis network cable couplers, AXIS T8129 PoE Extender, AXIS T8415 Wireless Installation Tool, Axis midspans<br>For more accessories, see <a href="https://axis.com">axis.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Security                          | Password protection, IP address filtering, HTTPS <sup>a</sup> encryption, IEEE 802.1x (EAP-TLS) <sup>a</sup> network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Supported protocols               | IPv4, IPv6 USGv6, HTTP, HTTPS <sup>a</sup> , SSL/TLS <sup>a</sup> , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>TM</sup> , SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, SRTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, LLDP, CDP.                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| System integration                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Application Programming Interface | Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at <a href="https://axis.com">axis.com</a><br>AXIS Guardian with One-Click Connection<br>ONVIF Profile G, ONVIF Profile S, and ONVIF Profile T, specifications at <a href="https://onvif.org">onvif.org</a>                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Analytics                         | <b>Included</b><br>AXIS Video Motion Detection, AXIS Fence Guard, AXIS Motion Guard, AXIS Loitering Guard, active tampering alarm, audio detection<br><b>Supported</b>                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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| <b>Video management software</b> | AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at <a href="http://axis.com/vms">axis.com/vms</a> | a. <i>This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<a href="http://openssl.org">openssl.org</a>), and cryptographic software written by Eric Young (<a href="mailto:eyay@cryptsoft.com">eyay@cryptsoft.com</a>).</i> |
| <b>Languages</b>                 | English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese                                             | Environmental responsibility:<br><a href="http://axis.com/environmental-responsibility">axis.com/environmental-responsibility</a>                                                                                                                                       |
| <b>Warranty</b>                  | Axis 3-year warranty and AXIS Extended Warranty option, see <a href="http://axis.com/warranty">axis.com/warranty</a>                                                  |                                                                                                                                                                                                                                                                         |