

# AXIS Q8641-E PT Thermal Network Camera

## Unobstructed views and long-distance detection

AXIS Q8641-E PT Thermal Network Camera offers outstanding thermal contrast and 10° field of view, which together with analytics, enables long-range detection and immediate visual confirmation for the operator. Highly responsive and reliable positioning camera, designed for continuous and jerk-free pan and tilt movements (360° endless and 135° from ground to sky). When column-mounted, it enables 360° unobstructed field of view, covering a wide area and reducing the cost for additional cameras. AXIS Q8641-E provides 384x288 thermal resolution, Zipstream and electronic image stabilization. Features both RJ45 and SFP interfaces, enabling a long-distance fiber connection with a failover network link.

- > [Reliable thermal detection](#)
- > [Outstanding thermal contrast – 384x288 resolution](#)
- > [Responsive positioning with quick, smooth pan and tilt capabilities](#)
- > [Save bandwidth with Zipstream](#)
- > [Electronic image stabilization](#)



# AXIS Q8641-E PT Thermal Network Camera

|  |   |                                  |  |
|--|---|----------------------------------|--|
| <b>Models</b>                            | AXIS Q8641-E 35 mm 30 fps 24 V<br>AXIS Q8641-E 35 mm 8.3 fps 24 V   | <b>Casing</b>                    | IP66- and NEMA 4X-rated powder coated aluminum<br>Color: white NCS S 1002-B<br>Front window: germanium<br>Sunshield: high-impact UV-stabilized thermoplastic   |
| <b>Camera</b>                            |   | <b>Sustainability</b>            | PVC free   |
| <b>Image sensor</b>                      | Uncooled Micro bolometer 384x288, pixel size: 17 µm<br>Spectral range: 8-14 µm  | <b>Memory</b>                    | 512 MB RAM, 256 MB Flash   |
| <b>Lens</b>                              | Athermalized<br>Horizontal field of view: 10.7° view, F1.2  | <b>Power</b>                     | 24 V AC/DC<br>Typical 16 W, max 182 W<br>Power loss recovery <sup>d</sup> , TVS 2 kV surge protection  |
| <b>Sensitivity</b>                       | NETD < 70 mK  | <b>I/O connector</b>             | Output power 12 V DC, max load 50 mA   |
| <b>Pan/Tilt</b>                          | Pan: 360° endless, 0.05°–120°/s<br>Tilt: –90 to +45°, 0.05°–60°/s<br>Jerk-free movements at low speed: $\sigma < 0.01^\circ/s$ (at 0.05°/s)<br>De-icing control <sup>a</sup><br>Preset accuracy: 0.05°<br>256 preset positions, guard tour, control queue, on-screen directional indicator, de-icing control, dynamic load balancing <sup>b</sup> | <b>Connectors</b>                | SFP slot (SFP module not included) <sup>e</sup><br>RJ45 10BASE-T/100BASE-TX/1000BASE-T network connector <sup>e</sup><br>Power connector<br>I/O connector: 6-pin terminal block with 4 configurable inputs/outputs   |
| <b>Video</b>                             |   | <b>Storage</b>                   | Support for microSD/microSDHC/microSDXC card<br>Support for SD card encryption (AES-XTS-Plain64 256bit)<br>Recording to network-attached storage (NAS)<br>For SD card and NAS recommendations see <a href="http://axis.com">axis.com</a>   |
| <b>Video compression</b>                 | H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles<br>Motion JPEG  | <b>Operating conditions</b>      | –40 °C to 60 °C (–40 °F to 140 °F)<br>Humidity 10–100% RH (condensing)<br><b>Wind load when PT operational</b><br>47 m/s (106 mph).<br>Maximum effective projected area (EPA): 0.105 m <sup>2</sup>  |
| <b>Resolution</b>                        | Sensor is 384x288. Image can be scaled up to 768x576.   | <b>Storage conditions</b>        | –40 °C to 65 °C (–40 °F to 149 °F)   |
| <b>Frame rate</b>                        | Up to 8.3 fps and 30 fps  | <b>Approvals</b>                 | EMC<br>EN 55032 Class A, EN 55024, EN 61000-6-1, EN 61000-6-2, EN 61000-3-2, EN 61000-3-3, 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<br><b>Safety</b><br>IEC/EN/UL 62368-1, IEC/EN/UL 60950-22<br><b>Environment</b><br>IEC/EN 60529 IP66, NEMA 250 Type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-27<br><b>Network</b><br>NIST SP500-267 |
| <b>Video streaming</b>                   | At least three H.264 and Motion JPEG streams, simultaneous and individually configured in max. resolution in full frame rate<br>Axis Zipstream technology in H.264<br>Controllable frame rate and bandwidth<br>VBR/ABR/MBR H.264  | <b>Dimensions</b>                | 557 x 229 x 289 mm (22 x 9 x 11 in)  |
| <b>Image settings</b>                    | Compression, brightness, sharpness, contrast, exposure zone, text and image overlay, mirroring of images, electronic image stabilization, multiple palettes   | <b>Weight</b>                    | 12 kg (26.5 lb)  |
| <b>Network</b>                           |   | <b>Included accessories</b>      | Installation guide, Windows® decoder 1-user license<br>Power connector, I/O connector, Torx® bits T20 and T30  |
| <b>Security</b>                          | Password protection, IP address filtering, HTTPSC encryption, network fail-over link <sup>c</sup> , IEEE 802.1x (EAP-TLS) <sup>c</sup> network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware  | <b>Optional accessories</b>      | AXIS T94J01A Wall Mount, AXIS T94N01G Pole Mount, AXIS T95A64 Corner Bracket, AXIS Cable 24 V DC/24–240 V AC 22 m <sup>f</sup> , AXIS T8611 SFP Module LC.LX, AXIS T8612 SFP Module LC.SX, AXIS T8613 SFP Module 1000BASE-T<br>For more accessories, see <a href="http://axis.com">axis.com</a>  |
| <b>Supported protocols</b>               | IPv4, IPv6 USGv6, HTTP, HTTPS <sup>c</sup> , SSL/TLS <sup>c</sup> , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>TM</sup> , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, LLDP, MQTT v3.1.1   | <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>   |
| <b>System integration</b>                |   | <b>Languages</b>                 | English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese  |
| <b>Application Programming Interface</b> | Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at <a href="http://axis.com">axis.com</a><br>One-click cloud connection<br>ONVIF® Profile G and ONVIF® Profile S, specification at <a href="http://onvif.org">onvif.org</a>  | <b>Warranty</b>                  | 5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>  |
| <b>Event triggers</b>                    | Detectors: live stream accessed, video motion detection, shock detection<br>Hardware: network, temperature<br>Input signal: digital input, manual trigger, virtual inputs<br>PTZ: moving, preset reached, ready<br>Storage: disruption, recording<br>System: system ready<br>Time: recurrence, use schedule                                       | <b>Export control</b>            | This product is subject to export control regulations. You should always consult and comply with the regulations of the appropriate local export control authorities.  |
| <b>Event actions</b>                     | Video recording to edge storage, pre- and post-alarm video buffering, external output activation, send SNMP trap, overlay text<br>PTZ control: preset position, guard tour<br>File upload: FTP, HTTP, HTTPS, SFTP, network share, email<br>Notification: HTTP, HTTPS, TCP, email  |                                  |  |
| <b>Data streaming</b>                    | Event data  |                                  |  |
| <b>Built-in installation aids</b>        | Pixel counter   |                                  |  |
| <b>Analytics</b>                         |   |                                  |  |
| <b>Applications</b>                      | <b>Included</b><br>AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, shock detection<br><b>Supported</b><br>AXIS Perimeter Defender<br>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>                           |   |                                  |  |

- Internal heaters to defrost ice build-up. Automatic for camera and activated by HTTP API (VAPIX) for positioning unit.
- 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.
- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](http://openssl.org)), and cryptographic software written by Eric Young ([eyay@cryptsoft.com](mailto:eyay@cryptsoft.com)).
- IP data and home position retained, and guard tour and other events resumed.
- If a network link is established via both the SFP slot and the RJ45 connector, the former acts as the primary link and the latter as the failover link.
- When using the 22 m (72 ft) AXIS Cable 24 V DC/24–240 V AC, a power supply capable of delivering 220 W is required to compensate for the power loss in the cable.

Environmental responsibility:

