

# AXIS Q8642-E PT Thermal Network Camera

## Unobstructed views and long-distance VGA detection

AXIS Q8642-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 Q8642-E provides 640x480 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 – 640x480 resolution](#)
- > [Responsive positioning with quick, smooth pan and tilt capabilities](#)
- > [Save bandwidth with Zipstream](#)
- > [Electronic image stabilization](#)



# AXIS Q8642-E PT Thermal Network Camera

<b>Variants</b>	AXIS Q8642-E 60 mm 30 fps 24 V AXIS Q8642-E 60 mm 8.3 fps 24 V
<b>Camera</b>	
<b>Image sensor</b>	Uncooled Micro bolometer 640x480, pixel size: 17 µm Spectral range: 8-14 µm
<b>Lens</b>	Athermalized Horizontal field of view: 10°, F1.25
<b>Sensitivity</b>	NETD < 50 mK
<b>Pan/Tilt</b>	Pan: 360° endless, 0.05°-120°/s Tilt: -90 to +45°, 0.05°-60°/s Jerk-free movements at low speed: $\sigma < 0.01^\circ/s$ (at 0.05°/s) De-icing control <sup>a</sup> Preset accuracy: 0.05° 256 preset positions, guard tour, control queue, on-screen directional indicator, de-icing control, dynamic load balancing <sup>b</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>	Sensor is 640x480. Image can be scaled up to 800x600 (SVGA).
<b>Frame rate</b>	Up to 8.3 fps and 30 fps
<b>Video streaming</b>	At least three H.264 and Motion JPEG streams, simultaneous and individually configured in max. resolution in full frame rate Axis Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/ABR/MBR H.264
<b>Image settings</b>	Compression, brightness, sharpness, contrast, exposure zone, text and image overlay, mirroring of images, electronic image stabilization, multiple palettes
<b>Network</b>	
<b>Security</b>	Password protection, IP address filtering, HTTPS <sup>c</sup> encryption, network fail-over link, IEEE 802.1x (EAP-TLS) network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware
<b>Network protocols</b>	IPv4, IPv6 USGv6, HTTP, HTTPS, SSL/TLS, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMPv1/v2/v3, RTP, ICMP, DHCP, ARP, SOCKS, SSH, LLDP, MQTT v3.1.1
<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="#">axis.com</a> AXIS Video Hosting System (AVHS) with One-Click Connection One-click cloud connection ONVIF <sup>®</sup> Profile G and ONVIF <sup>®</sup> Profile S, specification at <a href="#">onvif.org</a>
<b>Event triggers</b>	Detectors: live stream accessed, video motion detection, shock detection Hardware: network, temperature Input signal: digital input, manual trigger, virtual inputs PTZ: moving, preset reached, ready Storage: disruption, recording System: system ready Time: recurrence, use schedule
<b>Event actions</b>	Video recording to edge storage, pre- and post-alarm video buffering, external output activation, send SNMP trap, overlay text PTZ control: preset position, guard tour File upload: FTP, HTTP, HTTPS, SFTP, network share, email 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> AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard, shock detection <b>Supported</b> Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="#">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: germanium Sunshield: high-impact UV-stabilized thermoplastic
<b>Sustainability</b>	PVC free
<b>Memory</b>	512 MB RAM, 256 MB Flash
<b>Power</b>	24 V AC/DC Typical 16 W, max 182 W Power loss recovery <sup>d</sup> , TVS 2 kV surge protection <b>I/O connector</b> Output power 12 V DC, max load 50 mA
<b>Connectors</b>	SFP slot (SFP module not included) <sup>e</sup> RJ45 10BASE-T/100BASE-TX/1000BASE-T network connector Power connector I/O connector: 6-pin terminal block with 4 configurable inputs/outputs
<b>Storage</b>	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Recording to network-attached storage (NAS) For SD card and NAS recommendations see <a href="#">axis.com</a>
<b>Operating conditions</b>	-40 °C to 60 °C (-40 °F to 140 °F) Humidity 10-100% RH (condensing) <b>Wind load when PT operational</b> 47 m/s (106 mph). Maximum effective projected area (EPA): 0.105 m <sup>2</sup>
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F)
<b>Approvals</b>	<b>EMC</b> 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 <b>Safety</b> IEC/EN/UL 62368-1, IEC/EN/UL 60950-22 <b>Environment</b> IEC/EN 60529 IP66, NEMA 250 Type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-27 <b>Network</b> NIST SP500-267
<b>Dimensions</b>	557 x 229 x 289 mm (22 x 9 x 11 in)
<b>Weight</b>	12.2 kg (27 lb)
<b>Included accessories</b>	Installation guide, Windows <sup>®</sup> decoder 1-user license Power connector, I/O connector, Torx <sup>®</sup> bits T20 and T30
<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 For more accessories, see <a href="#">axis.com</a>
<b>Video management software</b>	AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available at <a href="#">axis.com/vms</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="#">axis.com/warranty</a>
<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.

- 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](#)), and cryptographic software written by Eric Young ([eay@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.