

# AXIS Q8752-E Bispectral PTZ Camera

## Thermal detection and visual verification

AXIS Q8752-E offers reliable thermal detection and visual verification in one bispectral camera. It features 360° infinite pan for fast repositioning and continuous tracking of objects. Featuring Electronic Image Stabilization (EIS) on both channels it ensures smooth video. Forensic WDR and Lightfinder 2.0 guarantees images with saturated colors and sharp details of moving objects even in challenging light or near darkness. This robust camera is packed with advanced security functionality. Built on a powerful analytics platform, it's easy to add custom-made 3rd party analytics. Furthermore, it's possible to connect AXIS Q8752-E using fiber optic cabling to overcome distance and bandwidth limitations.

- > [Thermal and visual camera in one](#)
- > [360° infinite pan](#)
- > [Dual Electronic Image Stabilization](#)
- > [Signed firmware, secure boot, and TPM 2.0](#)
- > [Thermal palettes](#)



# AXIS Q8752-E Bispectral PTZ Camera

<b>Variants</b>	AXIS Q8752-E 35 mm 8.3/30 fps AXIS Q8752-E Zoom 8.3/30 fps	<b>Audio input/output</b>	External microphone input or line input
<b>Camera</b>		<b>Network</b>	
<b>Image sensor</b>	<b>Visual:</b> 1/2.8" progressive scan CMOS <b>Thermal:</b> Uncooled microbolometer 640x480 pixels, pixel size: 17 µm. Spectral range: 8–14 µm	<b>Security</b>	IP address filtering, HTTPS <sup>c</sup> encryption, IEEE 802.1x (EAP-TLS) <sup>c</sup> network access control, user access log, centralized certificate management
<b>Lens</b>	<b>Visual:</b> Varifocal, 4.3–137.6 mm, F1.4–4.0 Horizontal field of view: 58.5°–2.4° Vertical field of view: 35°–1.3° Autofocus, auto-iris <b>Thermal:</b> 35 mm: Athermalized 35 mm, F1.2 Near focus distance: 33 m (108 ft) Horizontal field of view: 17° Vertical field of view: 12.8° <b>Zoom:</b> Athermalized 35–105 mm, F1.6 Near focus distance: 22–195 m (72–640 ft) Near manual focus distance: 7 m (23 ft) Horizontal field of view: 18°–6° Vertical field of view: 13.5°–4.5°	<b>Network protocols</b>	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS <sup>c</sup> , HTTP/2, TLS <sup>c</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP <sup>®</sup> , SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SSH, NTCIP, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)
<b>Day and night</b>	<b>Visual:</b> Automatically removable infrared-cut filter	<b>System integration</b>	
<b>Minimum illumination</b>	<b>Visual:</b> Color: 0.09 lux at 30 IRE, F1.4 B/W: 0.008 lux at 30 IRE, F1.4 Color: 0.06 lux at 50 IRE, F1.4 B/W: 0.01 lux at 50 IRE, F1.4	<b>Application Programming Interface</b>	Open API for software integration, including VAPIX <sup>®</sup> and AXIS Camera Application Platform; specifications at <i>axis.com</i> ONVIF <sup>®</sup> Profile G, ONVIF <sup>®</sup> Profile M, ONVIF <sup>®</sup> Profile S, and ONVIF <sup>®</sup> Profile T, specification at <i>onvif.org</i>
<b>Sensitivity</b>	<b>Thermal:</b> NETD < 50 mK	<b>Event conditions</b>	Device status: above operating temperature, above or below operating temperature, below operating temperature, IP address removed, network lost, new IP address, PTZ power failure, ring power overcurrent protection, storage failure, system ready, within operating temperature Digital audio input status Edge storage: recording ongoing, storage disruption, storage health issues detected PTZ: PTZ malfunctioning, PTZ movement, PTZ preset position reached, PTZ ready Scheduled and recurring: scheduled event Video: average bitrate degradation, day-night mode, live stream open
<b>Shutter speed</b>	<b>Visual:</b> 1/66500 s to 2 s	<b>Event actions</b>	Day-night mode Guard tour I/O Images: FTP, HTTP, HTTPS, SFTP, email and network share IR illumination: turn on, use while the rule is active MQTT: publish Notification: HTTP, HTTPS, TCP and email Overlay text Preset positions PTZ Autotracking: start temporary detection, toggle autotracking Recordings SNMP trap messages: send messages Video clips: FTP, HTTP, HTTPS, SFTP, email and network share WDR mode Wiper
<b>Pan/Tilt/Zoom</b>	<b>Pan:</b> 360° endless, 0.05°–120°/s <b>Tilt:</b> -90° to +45°, 0.05°–65°/s Jerk-free movements at low speed: ±0.01°/s (at 0.05°/s) Preset accuracy: 0.05° 256 preset positions, guard tour, control queue, focus window, on-screen directional indicator, de-icing control <sup>a</sup> , dynamic load balancing <sup>b</sup> <b>Visual:</b> 32x optical zoom, 12x digital zoom, total 384x zoom, focus recall <b>Thermal:</b> Zoom: 3x thermal zoom and 4x digital zoom, total 12x zoom	<b>Data streaming</b>	Event data
<b>System on chip (SoC)</b>		<b>Built-in installation aids</b>	Pixel counter, focus assistant
<b>Model</b>	ARTPEC-7	<b>Analytics</b>	
<b>Video</b>		<b>Applications</b>	<b>Included</b> AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, Orientation AID PTZ, audio detection, advanced gatekeeper Support for AXIS Camera Application Platform enabling installation of third-party applications, see <i>axis.com/acap</i>
<b>Video compression</b>	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main Profile Motion JPEG	<b>Approvals</b>	
<b>Resolution</b>	<b>Visual:</b> 1920x1080 HDTV 1080p to 320x180 <b>Thermal:</b> Sensor is 640x480. Image can be scaled up to 800x600 (SVGA)	<b>EMC</b>	EN 55032 Class A, EN 55024, EN 61000-6-1, EN 61000-6-2, CISPR 35, EN 50121-4, EN 50498 <b>Australia/New Zealand:</b> RCM AS/NZS CISPR 32 Class A <b>Canada:</b> ICES-3(A)/NMB-3(A) <b>Japan:</b> VCCI Class A ITE <b>Korea:</b> KC KN32 Class A, KC KN35 <b>USA:</b> FCC Part 15 Subpart B Class A <b>Railway:</b> IEC 62236-4
<b>Frame rate</b>	<b>Visual:</b> Up to 50/60 fps (50/60 Hz) in HDTV 1080p <b>Thermal:</b> Up to 8.3 fps and 30 fps	<b>Safety</b>	IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, CAN/CSA C22.2 No. 62368-1, CAN/CSA-C22.2 No. 60950-22
<b>Video streaming</b>	Multiple, individually configurable streams in H.264, H.265 and Motion JPEG Axis Zipstream technology in H.264 and H.265 Controllable frame rate and bandwidth VBR/ABR/MBR H.264/H.265	<b>Environment</b>	IEC/EN 60529 IP66, IEC 62262 IK10 <sup>d</sup> , NEMA 250 Type 4x, NEMA TS 2 (2.2.7-2.2.9), ISO 21207 (Method B), IEC/EN 60068-2-1, IEC/EN 60068-2-2, IEC 60068-2-6, IEC/EN 60068-2-14, IEC 60068-2-27, IEC/EN 60068-2-78, MIL-STD-810G (Method 501.5, 502.5, 505.5, 506.5, 507.5, 509.5)
<b>Image settings</b>	<b>Visual:</b> Saturation, contrast, brightness, sharpness, Forensic WDR: up to 120 dB depending on scene, white balance, day/night threshold, tone mapping, exposure control, exposure zones, defogging, compression, dynamic text and image overlay, 32 individual polygon privacy masks, electronic image stabilization <b>Thermal:</b> Compression, brightness, sharpness, contrast, local contrast, exposure control, exposure zones, text and image overlay, electronic image stabilization		
<b>Audio</b>			
<b>Audio streaming</b>	Audio in, simplex Echo cancellation and noise cancellation		
<b>Audio encoding</b>	24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate		

<b>Network</b>	NIST SP500-267	Humidity 10-100% RH (condensing)
<b>Cybersecurity</b>	ETSI EN 303 645, FIPS 140	<b>Wind load when PTZ operational</b> 37 m/s (83 mph) <sup>9</sup> , 45 m/s (100 mph) without weathershield With AXIS PT IR Illuminator Kit C: 40 m/s (90 mph), 52 m/s (116 mph) without weathershield Maximum effective projected area (EPA): 0.138 m <sup>2</sup>
<b>Cybersecurity</b>		
<b>Edge security</b>	Software: Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection, AES-XTS-Plain64 256bit SD card encryption Hardware: Axis Edge Vault cybersecurity platform TPM 2.0 (CC EAL4+, FIPS 140-2 Level 2), secure element (CC EAL 6+), Axis device ID, secure keystore, signed video, secure boot	<b>Storage conditions</b> -40 °C to 70 °C (-40 °F to 158 °F)
<b>Network security</b>	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2) <sup>c</sup> , IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS <sup>c</sup> , TLS v1.2/v1.3 <sup>c</sup> , Network Time Security (NTS), X.509 Certificate PKI, host-based firewall	<b>Dimensions</b> 244 x 360 x 582 mm (9.5 x 14 x 23 in)
<b>Documentation</b>	<i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> AXIS OS Software Bill of Material (SBOM) To download documents, go to <a href="https://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a> To read more about Axis cybersecurity support, go to <a href="https://axis.com/cybersecurity">axis.com/cybersecurity</a>	<b>Weight</b> 35 mm: 14.7 kg (32.4 lb) Zoom: 15.1 kg (33.3 lb)
<b>General</b>		
<b>Casing</b>	IP66-, NEMA 4X- and IK10-rated <sup>d</sup> powder coated aluminum Color: white NCS S 1002-B Front window: visual: glass, thermal: germanium Long-life silicone wiper Weathershield: high-impact UV-stabilized thermoplastic	<b>Included accessories</b> Installation guide, Windows <sup>®</sup> decoder 1-user license, connector kit, Torx <sup>®</sup> T20 bit, Torx <sup>®</sup> T30 bit, connector guard
<b>Sustainability</b>	PVC free	<b>Optional accessories</b> AXIS Surveillance Cards, AXIS T94J01A Wall Mount, AXIS T94N01G Pole Mount, AXIS T95A64 Corner Bracket, AXIS Washer Kit B, AXIS Cable 24 V DC/24-240 V AC 22 m <sup>h</sup> , AXIS T8611 SFP Module LC.LX, AXIS T8612 SFP Module LC.SX, AXIS T8613 SFP Module 1000BASE-T, AXIS PT IR Illuminator Kit C, AXIS T99 Illuminator Bracket Kit A, Power supply DIN PS24 480 W, AXIS T61 Audio and I/O Interface Series For more accessories, see <a href="https://axis.com">axis.com</a>
<b>Memory</b>	2048 MB RAM, 512 MB Flash	<b>Video management software</b> AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at <a href="https://axis.com/vms">axis.com/vms</a>
<b>Power</b>	20-28 V AC/DC, typical 16 W, max 204 W Power loss recovery <sup>e</sup> TVS 2000V, surge protection, voltage transient protection I/O connector: output power 12 V DC, max load 50 mA	<b>Languages</b> English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
<b>Connectors</b>	SFP slot (SFP module not included) <sup>f</sup> Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T I/O: 6-pin 2.5 mm terminal block for 4 configurable inputs/outputs Power: terminal block Audio (in camera unit): 3.5 mm mic/line in Illumination (in upper part of positioning unit)	<b>Warranty</b> 5-year warranty, see <a href="https://axis.com/warranty">axis.com/warranty</a>
<b>Storage</b>	Support for microSD/microSDHC/microSDXC card and encryption Recording to network-attached storage (NAS) For SD card and NAS recommendations see <a href="https://axis.com">axis.com</a>	<b>Export control</b> The product contains U.S.-origin controlled technology/component, the US Export Administration Regulations (EAR) are always applicable to the product. You should comply at all times with all applicable national and international (re-) export control regulations.
<b>Operating conditions</b>	-40 °C to 55 °C (-40 °F to 131 °F) Maximum temperature (intermittent): 65 °C (149 °F) Start-up temperature: -40 °C (-40 °F)	

- Internal heaters to defrost ice build-up, activated by HTTP API (VAPIX).
- 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](https://openssl.org)), and cryptographic software written by Eric Young ([eyay@cryptsoft.com](mailto:eyay@cryptsoft.com)).
- Excluding front window.
- 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 fail-over link.
- The values shown are based on results from actual wind tunnel testing. For drag force calculations, use maximum effective projected area (EPA).
- When using the 22 m (72 ft) AXIS Cable 24 V DC/24-240 V AC, a power supply capable of delivering 300 W is required to compensate for the power loss in the cable.