

AXIS Q8752-E Mk II Bispectral PTZ Camera

Thermal detection and visual verification

This bispectral camera offers reliable thermal detection and visual verification. It features 360° infinite pan for fast repositioning and continuous tracking of objects. Electronic image stabilization (EIS) on both channels ensures smooth video. And Lightfinder 2.0 and Forensic WDR deliver true colors and great detail in near darkness or challenging light. Built on a powerful analytics platform, it's easy to add Axis and 3rd party analytics. It's possible to connect this camera using fiber optic cabling to overcome distance and bandwidth limitations.

- > **Thermal and visual camera in one**
- > **360° infinite pan**
- > **Dual Electronic Image Stabilization**
- > **Built-in cybersecurity**
- > **Thermal palettes**



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Variants	AXIS Q8752-E Mk II 35 mm 8.3 fps AXIS Q8752-E Mk II 35 mm 30 fps AXIS Q8752-E Mk II Zoom 8.3 fps AXIS Q8752-E Mk II Zoom 30 fps	Audio	
Camera		Audio streaming	One-way (simplex, half duplex)
Image sensor	Visual: 1/2.8" progressive scan CMOS Thermal: Uncooled microbolometer 640x480 pixels, pixel size: 17 µm. Spectral range: 8–14 µm	Audio input	External microphone input or line input
Lens	Visual: 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 Thermal: 35 mm: Athermalized 35 mm, F1.2 Near focus distance: 31 m (102 ft) Horizontal field of view: 17° Vertical field of view: 12.8° Zoom: 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°	Audio encoding	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 bitrate
Day and night	Visual: Automatic IR-cut filter	Network	
Minimum illumination	Visual: Color: 0.06 lux at 50 IRE, F1.4 B/W: 0.01 lux at 50 IRE, F1.4	Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS ^c , HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP [®] , SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)
Sensitivity	Thermal: NETD < 50 mK	System integration	
Shutter speed	Visual: 1/66500 s to 2 s	Application Programming Interface	Open API for software integration, including VAPIX [®] and AXIS Camera Application Platform (ACAP); specifications at axis.com/developer-community . One-click cloud connection ONVIF [®] Profile G, ONVIF [®] Profile M, ONVIF [®] Profile S, and ONVIF [®] Profile T, specifications at onvif.org
Pan/Tilt/Zoom	Pan: 360° endless, 0.05°–120°/s Tilt: -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 [®] , dynamic load balancing ^b Visual: 32x optical zoom, 12x digital zoom, total 384x zoom, focus recall Thermal: Zoom: 3x thermal zoom and 4x digital zoom, total 12x zoom 35mm: fixed focal, no digital zoom	Video management systems	Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at axis.com/vms .
System on chip (SoC)		Onscreen controls	Image stabilization Day/night shift Video streaming indicator IR illumination Privacy masks Media clip Focus recall zone Timed wiper Wiper Heater
Model	ARTPEC-7	Edge-to-edge	Microphone pairing Speaker pairing
Memory	2 GB RAM, 512 MB Flash	Event conditions	Application Device status: above/below/within operating temperature, IP address blocked/removed, live stream active, network lost, new IP address, PTZ power failure, ring power overcurrent protection, system ready Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal okay Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: digital input is active, manual trigger, virtual input is active MQTT: MQTT client connected PTZ: PTZ control queue, PTZ malfunctioning, PTZ movement, PTZ preset position reached, PTZ ready Scheduled and recurring: schedule Video: average bitrate degradation, day-night mode
Compute capabilities	Deep learning processing unit (DLPU)	Event actions	Day-night mode Guard tour I/O: toggle I/O once, toggle I/O while the rule is active Illumination: use lights, use lights while the rule is active MQTT: send MQTT publish message Notification: HTTP, HTTPS, TCP and email Overlay text PTZ: PTZ preset, start/stop guard tour Recordings: record audio, record audio while the rule is active Security: erase configuration SNMP trap messages: send, send while the rule is active Images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email WDR mode Wiper: use wiper
Video		Built-in installation aids	Pixel counter, level grid
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main Profile Motion JPEG	Analytics	
Resolution	Visual: 1920x1080 HDTV 1080p to 320x180 Thermal: Sensor is 640x480. Image can be scaled up to 800x600 (SVGA)	Applications	Included AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, Orientation AID PTZ, audio detection, advanced gatekeeper
Frame rate	Visual: Up to 50/60 fps (50/60 Hz) in HDTV 1080p Thermal: Up to 8.3 fps or 30 fps depending on model		
Video streaming	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 Low latency mode		
WDR	Forensic WDR: Up to 120 dB depending on scene		
Image settings	Visual: Saturation, contrast, brightness, sharpness, 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 Thermal: Compression, brightness, sharpness, contrast, local contrast, exposure control, exposure zones, text and image overlay, electronic image stabilization		

Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap

Start-up temperature: -40 °C (-40 °F)
Humidity 10–100% RH (condensing)
Wind load when PTZ operational
37 m/s (83 mph)ⁱ, 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): 0.121 m²

Approvals	
Product markings	UL/cUL, CE, KC, VCCI, RCM
Supply chain	TAA compliant
EMC	CISPR 35, CISPR 32 Class A, EN 55035, EN 55032 Class A, EN 50121-4, EN 61000-6-1, EN 61000-6-2 Australia/New Zealand: RCM AS/NZS CISPR 32 Class A Canada: ICES(A)/NMB(A) Japan: VCCI Class A Korea: KS C 9835, KS C 9832 Class A USA: FCC Part 15 Subpart B Class A Railway: IEC 62236-4
Safety	CAN/CSA C22.2 No. 62368-1 ed. 3, IEC/EN/UL 62368-1 ed. 3
Environment	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP66, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9), ISO 21207 (Method B), MIL-STD-810 H (Method 501.7, 502.7, 505.7 506.6, 507.6, 509.7, 521.4)
Network	NIST SP500-267, IPv6 USGv6
Cybersecurity	ETSI EN 303 645, BSI IT Security Label, FIPS 140
Cybersecurity	
Edge security	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 Secure keystore: TPM 2.0 (CC EAL4+, FIPS 140-2 Level 2) Secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2) ^d , IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3 ^c , Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
Documentation	<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 axis.com/support/cybersecurity/resources To read more about Axis cybersecurity support, go to axis.com/cybersecurity
General	
Casing	IP66-, NEMA 4X- and IK10-rated ^f 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 This product can be repainted. For repainting instructions, go to the product's support page. For information about the impact on warranty, go to axis.com/warranty-implication-when-repainting .
Power	52–58 V DC, typical 25 W, max 185 W Power loss recovery ^g Surge protection 2kV, according to EN 61000-4-5
Connectors	Audio: 3.5 mm mic/line in I/O: 6-pin 2.5 mm terminal block for 4 configurable inputs/outputs Network: Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T, SFP slot (SFP module not included) ^h Power: DC input, terminal block Illumination (in upper part of positioning unit)
Storage	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 axis.com
Operating conditions	-40 °C to 60 °C (-40 °F to 140 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F)

Storage conditions	Temperature: -40 °C to 65 °C (-40 °F to 149 °F) Humidity: 5–95% RH (non-condensing)
Dimensions	244 x 360 x 582 mm (9.5 x 14 x 23 in) For the overall product dimensions, see the dimension drawing in this datasheet. Effective Projected Area (EPA): 0.121 m ² (0.39 ft ²)
Weight	35 mm: 14.9 kg (32.8 lb) Zoom: 15.3 kg (33.7 lb)
Box content	Camera, installation guide, connector kit
Optional accessories	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 mh, AXIS T8611 SFP Module LC.LX, AXIS T8612 SFP Module LC.SX, AXIS PT IR Illuminator Kit C, AXIS T99 Illuminator Bracket Kit A, Power supply DIN PS56 480 W, AXIS T61 Audio and I/O Interface Series For more accessories, see axis.com/products/axis-q8752-e-mk-ii#compatible-products
System tools	AXIS Site Designer, AXIS Device Manager, product selector, accessory selector, lens calculator Available at axis.com
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Warranty	5-year warranty, see axis.com/warranty
Export control	This product is subject to export control regulations, and you should always comply with all applicable national and international export or re-export control regulations.
Part numbers	Available at axis.com/products/axis-q8752-e-mk-ii#part-numbers
Sustainability	
Substance control	PVC free RoHS in accordance with EU RoHS Directive 2011/65/EU and 2015/863, and standard EN IEC 63000:2018 REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see echa.europa.eu
Materials	Screened for conflict minerals in accordance with OECD guidelines To read more about sustainability at Axis, go to axis.com/about-axis/sustainability
Environmental responsibility	axis.com/environmental-responsibility Axis Communications is a signatory of the UN Global Compact, read more at unglobalcompact.org

- 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), and cryptographic software written by Eric Young (ey@cryptsoft.com).*
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- 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).*

Electronic image stabilization

Electronic image stabilization (EIS) provides smooth video in situations where a camera is subject to vibrations. Built-in gyroscopic sensors continuously detect the camera's movements and vibrations, and they automatically adjust the frame to ensure you always capture the details you need. Electronic image stabilization relies on different algorithms for modeling camera motion, which are used to correct the images.

Lightfinder

The Axis Lightfinder technology delivers high-resolution, full-color video with a minimum of motion blur even in near darkness. Because it strips away noise, Lightfinder makes dark areas in a scene visible and captures details in very low light. Cameras with Lightfinder discern color in low light better than the human eye. In surveillance, color may be the critical factor to identify a person, an object, or a vehicle.

Forensic WDR

Axis cameras with wide dynamic range (WDR) technology make the difference between seeing important forensic de-

tails clearly and seeing nothing but a blur in challenging light conditions. The difference between the darkest and the brightest spots can spell trouble for image usability and clarity. Forensic WDR effectively reduces visible noise and artifacts to deliver video tuned for maximal forensic usability.

Thermal palettes

A mode that allows the user to select a color range to show relative temperature differences in a scene. The user can choose between black-and-white ranges, color ranges, or a mix between the two. The same input (measured thermal radiation) can result in different visual appearance depending on how each pixel value is mapped to a color range.

Zipstream

The Axis Zipstream technology preserves all the important forensic in the video stream while lowering bandwidth and storage requirements by an average of 50%. Zipstream also includes three intelligent algorithms, which ensure that relevant forensic information is identified, recorded, and sent in full resolution and frame rate.