AXIS Q1951-E Thermal Camera

Optimal image contrast for video analytics

AXIS Q1951-E delivers a high-quality thermal video stream for reliable detection 24/7. Ideal for perimeter security, it includes AXIS Motion Guard, AXIS Fence Guard, and AXIS Loitering Guard for proactive surveillance. With a powerful analytics platform, it's easy to add third-party analytics. Built-in cybersecurity features prevent unauthorized access and safeguard your system. For instance, Axis Edge Vault protects your Axis device ID and simplifies authorization of Axis products on your network. AXIS Q1951-E also includes a Trusted Platform Module (TPM) that is FIPS 140-2 level 2 certified. Furthermore, this halogen-free, compact camera is robust and suitable even for harsh conditions.

- > Reliable detection 24/7
- > Built-in cybersecurity features
- > Compact, robust, halogen-free design
- > Support for AI-based analytics
- > Electronic image stabilization (EIS)

AXIS Q1951-E Thermal Camera

Models	**AXIS Q1951-E 7 mm/13 mm/19 mm/35 mm**
Camera	
Image sensor	Uncooled microbolometer 384x288 pixels, pixel size: 17 µm. Spectral range: 8-14 µm
Lens	Athermalized **7 mm** Horizontal field of view: 55°, F1.18 Near focus distance: 1.3 m (4.3 ft) **13 mm** Horizontal field of view: 28°, F1.0 Near focus distance: 4 m (13 ft) **19 mm** Horizontal field of view: 19.4°, F1.23 Near focus distance: 8.5 m (28 ft) **35 mm** Horizontal field of view: 10.5°, F1.14 Near focus distance: 33 m (108 ft)
Sensitivity	NETD 40 mK @25C, F1.0
System on chip (SoC)	
Model	ARTPEC-7
Memory	1024 MB RAM, 512 MB Flash
Video	
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
Resolution	Sensor is 384x288. Image can be scaled up to 768x576.
Frame rate	Up to 8.3 fps and 30 fps
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 Video streaming indicator
Image settings	Contrast, brightness, sharpness, exposure zones, compression, rotation: auto, 0°, 90°, 180°, 270° including Corridor Format, mirroring, dynamic text and image overlay, polygon privacy mask
Audio	
Audio streaming	One-way, two-way audio via edge-to-edge technology
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 bit rate
Audio input/output	External microphone input or line input, simplex, two-way audio via edge-to-edge technology, ring power, automatic gain control
Network	
Security	Password protection, IP address filtering, HTTPS[a] encryption, IEEE 802.1x (EAP-TLS)[a] network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot, protection of cryptographic keys with FIPS 140-2 certified TPM 2.0 module, Axis Edge Vault with Axis device ID
Supported protocols	IPv4, IPv6 USGv6, HTTP, HTTPS[a], HTTP/2, SSL/TLS[a], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SRTP, TCP, UDP, IGMPv1/v2/v3, RTCP, DHCPv4/v6, SOCKS, SSH, LLDP, MQTT v3.1.1, Syslog
System integration	
Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com* One-click cloud connection ONVIF® Profile G, ONVIF® Profile S, and ONVIF® Profile T, specification at *onvif.org*
Onscreen controls	Heater
Event conditions	Analytics, operating temperature, supervised external input, edge storage events, digital audio, virtual inputs through API
Event actions	Record video: SD card and network share Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email Pre- and post-alarm video or image buffering for recording or upload Notification: email, HTTP, HTTPS, TCP and SNMP trap Overlay text, play audio clip, I/O, MQTT
Data streaming	Event data
Built-in installation aids	Pixel counter
Analytics	
Applications	**Included** AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS Video Motion Detection, active tampering alarm, audio detection **Supported** AXIS Perimeter Defender with AI-based functionality Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*
General	
Casing	IP66/IP67-, NEMA 4X-, and IK10-rated[b] casing Polycarbonate blend and aluminum Color: white NCS S 1002-B
Sustainability	PVC free, BFR/CFR free
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 4.96 W, max 12.95 W 12–28 V DC, typical 4.92 W, max 12.95 W
Connectors	Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T 3.5 mm mic/line in Terminal block for 1 supervised alarm input and 1 output (12 V DC output, max. load 25 mA) DC input, terminal block
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) Humidity 10–100% RH (condensing) De-icing capability, compliant to MIL-STD-810H Method 521.4
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (non-condensing)
Approvals	**EMC** CISPR 24, CISPR 35, EN 50121-4, EN 55024, EN 55032 Class A, EN 55035, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), IEC 62236-4, KC KN32 Class A, KC KN35, RCM AS/NZS CISPR32 Class A, VCCI Class A **Safety** IEC/EN/UL 60950-22, IEC/EN/UL 62368-1 **Environment** IEC 60068-2-1, IEC/EN 60068-2-14, IEC 60068-2-2, IEC 60068-2-27, IEC 60068-2-6, IEC/EN 60068-2-78, IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10[b], ISO 21207 Method B, MIL-STD-810H (Method 501.7, 502.7, 505.7, 506.6, 507.6, 509.7, 510.7, 514.8, 516.8, 521.4), NEMA 250 Type 4X, NEMA TS 2 (2.2.7–2.2.9) **Network** NIST SP500-267
Dimensions	Ø132 x 272 mm (Ø5.2 x 10.7 in)
Weight	1400 g (3.1 lb)
Included accessories	Installation guide, Windows® decoder 1-user license, Resistorx® L-key, wall and ceiling mount bracket, terminal block connectors, connector guard
Optional accessories	AXIS T94F01M J-Box/Gang Box Plate, AXIS T91A47 Pole Mount, AXIS T94P01B Corner Bracket, AXIS T94F01P Conduit Back Box, AXIS Weather Shield K, Axis PoE Midspans For more accessories, see *axis.com*
Video management software	AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at *axis.com/vms*

Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese
Warranty	5-year warranty, see *axis.com/warranty*
Export control	The product is subject to export control regulations. You should always consult and comply with the regulations of the appropriate local export control authorities.

a. *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).*
b. *Excluding front window*

Environmental responsibility:

axis.com/environmental-responsibility

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