AXIS Q1910/-E Thermal Network Cameras

Reliable detection in dark and challenging conditions

> **Thermal imaging for IP-Surveillance**
>
> **Outdoor-ready model with window heater**
>
> **Power over Ethernet**
>
> **Multiple H.264 streams with individual palettes**
>
> **Intelligent video capabilities**

AXIS Q1910/-E Thermal Network Cameras are a perfect complement to any network video system that needs to secure an area 24 hours a day, seven days a week. The cameras use thermal imaging, which allows users to detect people, objects and incidents in complete darkness and difficult conditions such as smoke, haze, dust and light fog.

AXIS Q1910 is intended for indoor environments, while AXIS Q1910-E is an out-of-the-box, outdoor-ready model that is designed to withstand harsh weather conditions. AXIS Q1910-E comes with a built-in heater for the window.

Installation of both products is made easy and cost-effective with Power over Ethernet (IEEE 802.3af), which eliminates the need for power cables.

AXIS Q1910/-E cameras support H.264 video compression, which reduces bandwidth usage and storage needs by up to 80% compared to Motion JPEG. The cameras provide multiple, individually configurable video streams in H.264 and Motion JPEG. Each stream can have its own color palette setting.

AXIS Q1910/-E are the first thermal cameras on the market with two-way audio support, which allows the user to communicate with visitors and intruders.

Since thermal cameras are immune to problems with light conditions and normal shadows, they can achieve higher accuracy than conventional cameras in most intelligent video applications. AXIS Q1910/-E cameras offer motion detection, audio detection, and detection of tampering attempts. The cameras also provide capacity for third-party analytics modules, including support for AXIS Camera Application Platform.

AXIS Q1910/-E cameras support ONVIF for interoperability between network video products.
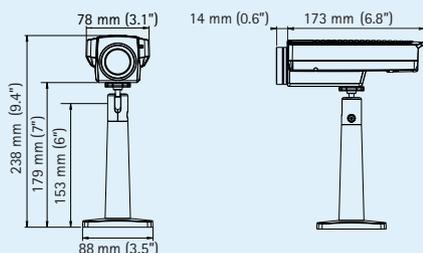
Technical specifications – AXIS Q1910/–E Thermal Network Cameras

Camera

Models	Indoor: **AXIS Q1910** Outdoor: **AXIS Q1910–E**
Image sensor	Uncooled Micro bolometer 160x128 pixels
Lens	f 13 mm, F1.25. Angle of view, horizontal: 17°
Detection range	200 m (220 yards) for humans (1.8 m x 0.5 m) 550 m (600 yards) for vehicles (2.3 m x 2.3 m) Calculated with Johnson's criteria. The detection range varies in different weather conditions.
Sensitivity	NETD < 100 mK

Video

Video compression	H.264 (MPEG-4 Part 10/AVC) Motion JPEG
Resolutions	Sensor is 160x128. Image can be scaled up to 720x576 (D1) and to standard VGA resolutions
Frame rate	8.33 fps
Video streaming	At least 5 streams in H.264 and Motion JPEG: simultaneous, individually configured streams in max. resolution at 8.33 fps Controllable frame rate and bandwidth. VBR/CBR H.264
Image settings	Compression, brightness, exposure control, rotation, mirroring of images, text and image overlay, privacy mask, multiple palettes

Audio

Audio streaming	Two-way, half duplex
Audio compression	AAC LC 8/16 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz Configurable bit rate
Audio input/ output	**AXIS Q1910:** Built-in microphone, external microphone or line input, line output **AXIS Q1910–E:** External microphone or line input, line output

Network

Security	Password protection, IP address filtering, HTTPS* encryption, IEEE 802.1X* network access control, digest authentication, user access log
Supported protocols	IPv4/v6, HTTP, HTTPS*, QoS Layer 3 DiffServ, FTP, SMTP, Bonjour, UPnP, SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS. Wide range of PT heads supported (drivers available for download at www.axis.com).

System integration

Application Programming Interface	Open API for software integration, including the ONVIF specification available at www.onvif.org, as well as VAPIX® and AXIS Camera Application Platform from Axis Communications, specifications available at www.axis.com Support for AXIS Video Hosting System (AVHS) with One-Click Camera connection
Intelligent video	Video motion detection, active tampering alarm, audio detection. Support for AXIS Camera Application Platform enables installation of additional applications
Alarm triggers	Intelligent video and external input
Alarm events	File upload via FTP, HTTP and email; notification via email, HTTP and TCP; external output activation
Video buffer	32 MB pre- and post alarm

General

Casing	**AXIS Q1910:** Zinc chassis **AXIS Q1910–E:** IP66-rated aluminum casing and a germanium window
Processor and memory	ARTPEC-3, 128 MB RAM, 128 MB Flash
Power	Power over Ethernet IEEE 802.3af Class 3 8-20 V DC / 20-24 V AC **AXIS Q1910:** max 8.2 W, max 12.7 VA **AXIS Q1910–E:** max 11.2 W, max 17.4 VA Power supply not included
Connectors	RJ-45 10BASE-T/100BASE-TX PoE, terminal block for power, terminal block for two configurable inputs/outputs 3.5 mm mic/line in, 3.5 mm line out RS-422/RS-485 Terminal block for **AXIS Q1910/–E** heater
Local storage	SD/SDHC memory card slot (card is not included)
Operating conditions	Shock resistance: 70 g shock pulse with a 11 ms half-sine profile Vibration resistance: 4.3 g random vibration for 8 hours (three axes) **AXIS Q1910:** -40 °C to 50 °C (-40 °F to 122 °F), humidity 20-80% RH (non-condensing) **AXIS Q1910–E:** -40 °C to 50 °C (-40 °F to 122 °F), IP66
Approvals	EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 50121-4, EN 61000-6-1, EN 61000-6-2, EN 60950-1, FCC Part 15, Subpart B, Class B, VCCI, Class B ITE, C-tick AS/NZS CISPR 22, ICES-003, Class B, IP66
Weight	**AXIS Q1910:** 990 g (2.18 lb.) **AXIS Q1910–E:** 3520 g (7.76 lb.)
Included accessories	Connector kit, Installation Guide, Windows decoder 1-user license **AXIS Q1910–E:** wall mount bracket, 5 m (16 ft.) Ethernet cable
Optional accessories	Wall bracket accessories Pan/tilt motor AXIS Camera Station and video management software from Axis' Application Development Partners. For more information, see www.axis.com/products/video/software/

*This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org)

More information is available at www.axis.com

Dimensions: AXIS Q1910 Network Camera

78 mm (3.1") 14 mm (0.6") 173 mm (6.8")
238 mm (9.4") 179 mm (7") 153 mm (6")
88 mm (3.5")

Dimensions: AXIS Q1910–E Network Camera including wall mount bracket with internal cable channel

102 mm (4.0") 128 mm (5.0") 111 mm (4.4") 142 mm (5.6") Max. inclination 70° 120 mm (4.7") 86 mm (3.4")
129 mm (5.1") 156 mm (6.1") 140 mm (5.5") 162 mm (6.4") 10 mm (0.4")
343 mm (13.5") 405 mm (15.9") 180 mm (7.1") 40 mm (1.6") 80 mm (3.1")
204 mm (8")

Without sunshield   With sunshield   Wall mount arm   Back side of wall mount bracket

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