AXIS Q1921/-E Thermal Network Cameras

High quality detection and wide range coverage.

AXIS Q1921/-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 Q1921 is intended for indoor environments, while AXIS Q1921-E is an out-of-the-box, outdoor-ready model with a built-in window heater that is designed to withstand harsh weather conditions.

A resolution of 384x288 and a range of lenses make it possible to optimize detection performance to meet most application requirements. Advanced software processing and a frame rate of up to 30 fps will further improve the thermal image quality.

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 Q1921/-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 Q1921/-E cameras support ONVIF for interoperability between network video products.

Installation is made easy and cost effective with Power over Ethernet (IEEE 802.3af). AXIS Q1921/-E cameras support H.264 video compression, which reduces bandwidth usage and storage needs. The cameras provide multiple, individually configurable video streams in H.264 and Motion JPEG.
Technical specifications – AXIS Q1921/-E Thermal Network Cameras

Camera

Models
- Indoor: Q1921, 10 mm and 19 mm
- Outdoor: Q1921-E, 10 mm, 19 mm, 35 mm and 60 mm

Image sensor
Uncooled Micro bolometer 384x288 pixels

Detection range

<table>
<thead>
<tr>
<th>Lens F Viewing</th>
<th>Human</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>(TA mount) angle*</td>
<td>(1.8x0.5 m)</td>
<td>(2.3x2.3 m)</td>
</tr>
<tr>
<td>10 mm 1.2</td>
<td>55°</td>
<td>200 m/220 yd.</td>
</tr>
<tr>
<td>19 mm 1.0</td>
<td>29°</td>
<td>380 m/415 yd.</td>
</tr>
<tr>
<td>35 mm 1.2</td>
<td>15°</td>
<td>700 m/765 yd.</td>
</tr>
<tr>
<td>60 mm 1.2</td>
<td>9°</td>
<td>1200 m/1312 yd.</td>
</tr>
</tbody>
</table>

Sensitivity
NetD < 100 mK

Video

Video compression
H.264 (MPEG-4 Part 10/AVC)

Resolutions
Sensor is 384x288. Image can be scaled up to 768x576 and to standard VGA resolutions.

Standard frame rate
Up to 30 fps within EU, Norway, Switzerland, Canada, USA, Japan, Australia, New Zealand.

Up to 8.3 fps in other countries*  *Frame rate above 9 fps may be subject to export control regulations

Video streaming
- At least 1 stream in H.264 and Motion JPEG; simultaneous, individually configured streams in max. resolution at 30 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, palette

Audio

Audio streaming
Two-way, half duplex

Audio compression
AAC LC 8/16 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz

Audio input/ output
- AXIS Q1921: Built-in microphone, external microphone or line input, line output
- AXIS Q1921-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/IPv6, 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).

* 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

System integration

Application
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.

Programming Interface
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, temperature 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 Q1921: Zinc chassis
AXIS Q1921-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 Q1921: max 6 W, max 10 VA
AXIS Q1921-E: max 10 W, max 16 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 Q1921/-E heater

Local storage
SD/SDHC memory card slot (card is not included)

Operating conditions
AXIS Q1921/-E: -40 °C to 60 °C (-40 °F to 140 °F)
- Humidity 20-80% RH (non-condensing)

Approvals
- EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 55024
- EN 60950-1, EN 50121-4, EN 61000-6-1, EN 61000-6-2
- FCC Part 15 Subpart B Class B, VCCI Class B ITE
- IEC TR 60721-4-3 3M4/-4-4 4M4 (shock/vibration)
- IEC 60529 IP66

Weight
AXIS Q1921: 950 g (2.10 lb.) - 970 g (2.14 lb.)
AXIS Q1921-E: 3475 g (7.66 lb.) - 3650 g (8.05 lb.)

Family
- 10 mm (0.4")
- 10 mm (0.4")
- 120 mm (4.7")
- 160 mm (6.3")
- 204 mm (8")
- 401 mm (15.9")

Distance to subject:
- 3.3 m (10 ft)
- 6.6 m (22 ft)
- 12.1 m (40 ft)
- 18.3 m (60 ft)
- 24.4 m (80 ft)

Frame rate:
- 25 fps max. resolution at 30 fps
- Up to 8.3 fps in other countries*

Frame rate above 9 fps may be subject to export control regulations

Japan, Australia, New Zealand
Up to 30 fps within EU, Norway, Switzerland, Canada, USA, Japan, Australia, New Zealand
Up to 8.3 fps in other countries*

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