

# AXIS Q8742-LE Bispectral PTZ Network Camera

Thermal and visual surveillance in one

AXIS Q8742-LE Bispectral PTZ Network Camera is a high-end combination of thermal camera with outstanding contrast for reliable detection and verification around-the-clock and in all weather and light conditions and an exceptionally light-sensitive visual camera for identification purposes. Designed for continuous, jerk-free pan and tilt movements, the camera includes long-range IR illumination to enhance identification even in complete darkness or challenging mixed lighting conditions. Easy to control and install with one IP address and multiple mounting options. The camera offers a tilt view of 45° above the horizon, and when column-mounted, it enables 360° unobstructed field of view.

- > **Reliable detection, fast verification and identification**
- > **Bispectral video streams**
- > **Easy to install with one IP address**
- > **Responsive positioning 360° endless pan and 135° from ground to sky**
- > **Long-distance network connection**



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|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
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| Models                            | AXIS Q8742-LE 35 mm 8.3/30 fps<br>AXIS Q8742-LE, Zoom 8.3/30 fps                                                                                                                                                                                                                                                                                                                                                                                                                                          | Supported protocols | IPv4/v6, HTTP, HTTPS <sup>c</sup> , SSL/TLS <sup>c</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>TM</sup> , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, NTCIP |
| Camera                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Image sensor                      | Visual: 1/2.8" progressive scan CMOS<br>Thermal: Uncooled micro bolometer 640x480 pixels, Pixel size: 17µm                                                                                                                                                                                                                                                                                                                                                                                                |                     |                                                                                                                                                                                                                                                          |
| Lens                              | Visual: 4.3–129 mm, F1.6–4.7<br>Horizontal field of view: 65.6°–2°<br>Vertical field of view: 39°–1.2°<br>Autofocus, auto-iris<br>Thermal:<br>35 mm:<br>Athermalized 35 mm, F1.2<br>Near focus distance: 33 m (108 ft)<br>Horizontal field of view: 17°<br>Vertical field of view: 12.8°<br>Zoom:<br>Athermalized 35–105 mm, F1.6<br>Near pre-focused distance: 22–195 m (72–640 ft)<br>Near manual focus distance: 7 m (23 ft)<br>Horizontal field of view: 18°–6°<br>Vertical field of view: 13.5°–4.5° |                     |                                                                                                                                                                                                                                                          |
| Day and night                     | Visual: Automatic switching from infrared-cut filter to infrared pass filter in night mode                                                                                                                                                                                                                                                                                                                                                                                                                |                     |                                                                                                                                                                                                                                                          |
| Minimum illumination              | Visual:<br>Color: 0.2 lux at 30 IRE F1.6<br>B/W: 0.01 lux at 30 IRE F1.6<br>Color: 0.25 lux at 50 IRE F1.6<br>B/W: 0.02 lux at 50 IRE F1.6<br>B/W: 0.0 lux with IR illumination                                                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Sensitivity                       | Thermal: NETD < 50 mK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                                                                                                                                                                                                                                                          |
| Shutter time                      | Visual: 1/66500 s to 2 s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                                                                                                                                                                                                          |
| Pan/Tilt/Zoom                     | Pan: 360° endless, 0.05°–120°/s<br>Tilt: -90° to +45°, 0.05°–65°/s<br>Jerk-free movements at low speed: ±0.01°/s (at 0.05°/s)<br>Preset accuracy: 0.05°<br>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><br>Visual: 30x optical zoom and 12x digital zoom, total 360x zoom, Focus recall<br>Thermal:<br>Zoom: 3x thermal zoom and 4x digital zoom, total 12x zoom                   |                     |                                                                                                                                                                                                                                                          |
| Video                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Video compression                 | H.264 (MPEG-4 Part 10/AVC), Baseline, Main and High Profiles Motion JPEG                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                                                                                                                                                                                                          |
| Resolution                        | Visual: 1920x1080 (HDTV 1080p) to 320x180<br>Thermal: Sensor is 640x480. Image can be scaled up to 800x600 (SVGA)                                                                                                                                                                                                                                                                                                                                                                                         |                     |                                                                                                                                                                                                                                                          |
| Frame rate                        | Visual: Up to 25/30 fps (50/60 Hz) in HDTV 1080p<br>Thermal: Up to 8.3 fps and 30 fps                                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                                                                                                                                                                                                                                                          |
| Video streaming                   | Axis Zipstream technology in H.264<br>Controllable frame rate and bandwidth<br>VBR/MBR H.264<br>Multiple, individually configurable streams in H.264 and Motion JPEG                                                                                                                                                                                                                                                                                                                                      |                     |                                                                                                                                                                                                                                                          |
| Image settings                    | Visual: Compression, color, brightness, sharpness, contrast, local contrast, white balance, exposure control, exposure zones, automatic backlight compensation, fine tuning of behavior at low light, 120 dB WDR - forensic capture, manual shutter time, text and image overlay, 20 individual 3D privacy masks, electronic image stabilization<br>Thermal: Compression, brightness, sharpness, contrast, local contrast, exposure control, exposure zones, text and image overlay                       |                     |                                                                                                                                                                                                                                                          |
| Network                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Security                          | Password protection, IP address filtering, HTTPS <sup>c</sup> encryption, network fail-over link <sup>e</sup> , IEEE 802.1X <sup>c</sup> network access control, digest authentication, user access log, centralized certificate management                                                                                                                                                                                                                                                               |                     |                                                                                                                                                                                                                                                          |
| System integration                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Application Programming Interface | Open API for software integration, including VAPIX <sup>®</sup> and AXIS Camera Application Platform; specifications at <i>axis.com</i><br>AXIS Video Hosting System (AVHS)<br>ONVIF <sup>®</sup> Profile S and ONVIF <sup>®</sup> Profile G, specification at <i>onvif.org</i>                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Analytics                         | Included<br>AXIS Video Motion Detection, AXIS Fence Guard, AXIS Motion Guard<br>Supported<br>AXIS Camera Application Platform enabling installation of third-party applications, see <i>axis.com/acap</i>                                                                                                                                                                                                                                                                                                 |                     |                                                                                                                                                                                                                                                          |
| Event triggers                    | Analytics, temperature, external input, time scheduled, edge storage events, PTZ preset                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                                                                                                                                                                                                                                                          |
| Event actions                     | Record video: SD card and network share<br>Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email<br>Pre- and post-alarm video or image buffering for recording or upload<br>Notification: email, HTTP, HTTPS, TCP and SNMP trap<br>PTZ: PTZ preset, start/stop guard tour<br>Overlay text, external output activation, wiper sequence, washer sequence                                                                                                                         |                     |                                                                                                                                                                                                                                                          |
| Data streaming                    | Event data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |                                                                                                                                                                                                                                                          |
| Built-in installation aids        | Pixel counter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                     |                                                                                                                                                                                                                                                          |
| General                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Casing                            | IP66- and NEMA 4X-rated powder coated aluminum<br>Color: white NCS S 1002-B<br>Front window: Visual: Glass, Thermal: Germanium<br>Long-life silicone wiper<br>Weathershield: High-impact UV-stabilized thermoplastic                                                                                                                                                                                                                                                                                      |                     |                                                                                                                                                                                                                                                          |
| Sustainability                    | PVC free                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                                                                                                                                                                                                          |
| Memory                            | 512 MB RAM, 512 MB Flash                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                                                                                                                                                                                                                                          |
| Power                             | 20–28 V AC/DC<br>Typical: 16 W (without illumination), 64 W (with illumination)<br>Max: 204 W (without illumination), 300 W (with illumination)<br>Power loss recovery <sup>d</sup><br>TVS 2000V, surge protection, voltage transient protection<br>I/O connector: output power 12 V DC, max load 50 mA                                                                                                                                                                                                   |                     |                                                                                                                                                                                                                                                          |
| Connectors                        | SFP slot (SFP module not included) <sup>e</sup><br>RJ45 10BASE-T/100BASE-TX/1000BASE-T network connector <sup>e</sup><br>Power connector<br>I/O connector: 6-pin terminal block with 4 configurable inputs/outputs                                                                                                                                                                                                                                                                                        |                     |                                                                                                                                                                                                                                                          |
| IR illumination                   | Distance<br>Without diverging lenses 10° x 10°: 500 m (1640 ft)<br>With diverging lenses 35° x 10°: 240 m (787 ft) <sup>f</sup><br>With diverging lenses 60° x 25°: 135 m (443 ft)<br>With diverging lenses 80° x 30°: 100 m (328 ft)<br>With diverging lenses 120° x 50°: 65 m (213 ft) <sup>g</sup><br>Power: 96 W<br>Wavelength: 850 nm<br>Illumination intensity adjustable during installation<br>Illumination synchronized with day/night mode                                                      |                     |                                                                                                                                                                                                                                                          |
| Storage                           | Support for microSD/microSDHC/microSDXC card (included)<br>Support for SD card encryption<br>Support for recording to network-attached storage (NAS)<br>For SD card and NAS recommendations see <i>axis.com</i>                                                                                                                                                                                                                                                                                           |                     |                                                                                                                                                                                                                                                          |
| Operating conditions              | -50 °C to 55 °C (-58 °F to 131 °F)<br>Maximum (intermittent): 65 °C (149 °F)<br>Arctic Temperature Control: start-up at -40 °C (-40 °F)<br>Humidity: 10–100% RH (condensing)<br>Wind load when PTZ operational<br>40 m/s (90 mph) <sup>h</sup> , 52 m/s (116 mph) without weathershield<br>Maximum effective projected area (EPA): 0.183 m <sup>2</sup>                                                                                                                                                   |                     |                                                                                                                                                                                                                                                          |

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| <b>Storage conditions</b>   | -40 °C to 70 °C (-40 °F to 158 °F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Approvals</b>            | EMC<br>EN 55032 Class A, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, VCCI Class A ITE, ICES-003 Class A, RCM AS/NZS CISPR 32 Class A, EN 50121-4, IEC 62236-4, KC KN32 Class A, KC KN35<br>Environment<br>IEC/EN 60529 IP66, IEC 62262 IK10 <sup>i</sup> , NEMA 250 Type 4x, ISO 4892-2, IEC 60068-2-6, IEC 60068-2-27, IEC/EN 60068-2-1, IEC/EN 60068-2-2, IEC/EN 60068-2-14, IEC/EN 60068-2-78<br>Safety<br>IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC/EN 60598-1, IEC/EN 62471 (risk group 2) |
| <b>Dimensions</b>           | 495 x 360 x 582 mm (19½ x 14 x 23 in)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Weight</b>               | 35 mm: 18.7 kg (41.2 lb))<br>Zoom: 19.2 kg (42.3 lb)                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Included accessories</b> | Installation Guide<br>AXIS PT IR Illuminator Kit C<br>AXIS Surveillance Card 64 GB<br>Connector Kit<br>Torx® T20 bit, Torx® T30 bit                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Optional accessories</b> | 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>l</sup> , AXIS T8611 SFP Module LC.LX, AXIS T8612 SFP Module LC.SX, AXIS T8613 SFP Module 1000BASE-T, Power supply DIN PS24 480 W<br>For more accessories, see <a href="http://axis.com">axis.com</a>                                                                                                                                                                           |

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| <b>Video management software</b> | AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available at <a href="http://axis.com/vms">axis.com/vms</a> |
| <b>Languages</b>                 | English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese                                              |
| <b>Warranty</b>                  | Axis 3-year warranty and AXIS Extended Warranty option, see <a href="http://axis.com/warranty">axis.com/warranty</a>                                                   |
| <b>Export control</b>            | This product is subject to export control regulations. You should always consult and comply with the regulations of the appropriate local export control authorities.  |

- a. Internal heaters to defrost ice build-up, activated by HTTP API (VAPIX).
- b. 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.
- c. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([www.openssl.org](http://www.openssl.org)), and cryptographic software written by Eric Young ([eyay@cryptsoft.com](mailto:eyay@cryptsoft.com)).
- d. IP data and home position retained, and guard tour and other events resumed.
- e. 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.
- f. 35° diverging lenses installed.
- g. 120° diverging lenses as optional accessory.
- h. The values shown are based on results from actual wind tunnel testing. For drag force calculations, use maximum effective projected area (EPA).
- i. Excluding front window.
- j. When using the 22 m (72 ft) AXIS Cable 24 V DC/24-240 V AC, a power supply capable of delivering 400 W is required to compensate for the power loss in the cable.

Environmental responsibility:

[axis.com/environmental-responsibility](http://axis.com/environmental-responsibility)