

AXIS Q60-C PTZ Dome Network Cameras

High-speed PTZ domes with active cooling: AXIS Q6042-C/Q6044-C/Q6045-C



- > Operate in temperatures up to 75 °C (167 °F)
- > Outdoor-ready; meet military standard
- > Up to HDTV 1080p; powerful zoom
- > SFP slots for fiber, RJ45 connections
- > I/O for alarm in/out

The top-of-the-line AXIS Q60-C PTZ Dome Network Cameras provide exceptional and reliable surveillance in environments such as deserts, where high ambient temperatures and solar radiation require cameras to operate in extreme heat. The outdoor-ready AXIS Q60-C cameras are ideal for use at construction and open-pit mining sites, along pipelines, and for city surveillance.

With a built-in active cooling system, AXIS Q60-C cameras can operate in temperatures up to 75 °C (167 °F). The robust cameras meet the tough military standard, MIL-STD-810G, ensuring reliable operation in harsh weather conditions such as sandstorms.

With resolutions up to HDTV 1080p, AXIS Q60-C cameras enable 360° pan for wide area coverage and powerful zoom for capturing details. AXIS Q6042-C and AXIS Q6044-C support electronic image stabilization for more useful video in windy conditions. In fog, AXIS Q6044-C can provide clearer video with its automatic defog functionality.

The supplied media converter switch allows AXIS Q60-C cameras to be connected in a daisy chain to the network using standard network or fiber optic cables that help lower the cost of installing the cameras over long distances. The switch also enables the cameras to connect to external alarm devices via input/output ports, and to 12 V power.

AXIS Q60-C cameras have day/night functionality and enhanced capacity for intelligent video. Built-in analytics include autotracking and Active Gatekeeper. AXIS Q6045-C offers additional analytics such as fence detector, object removed and enter/exit detection.



Mounting brackets are sold separately.



Reliable operation in searing heat

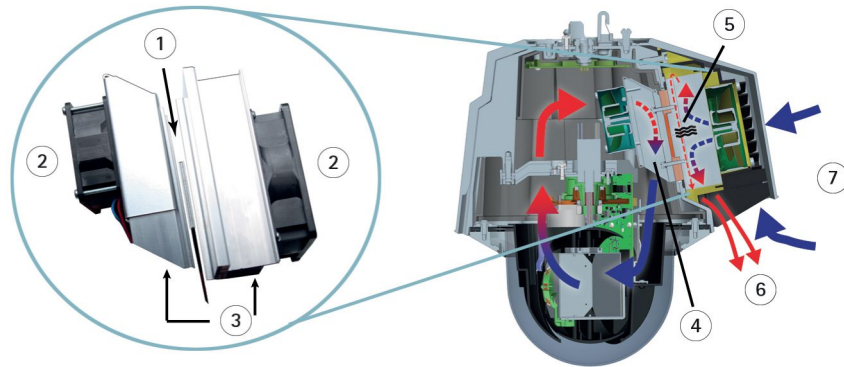
AXIS Q60-C PTZ domes ensure reliable surveillance in demanding environments. The cameras are tested to meet the tough MIL-STD-810G standard for high temperature, temperature shock, radiation, rain, humidity, salt fog, sand and dust.

Robust, high-performance cameras

AXIS Q60-C cameras are designed for round-the-clock pan/tilt/operation, with 360° endless pan and high zoom for coverage of an extremely wide area. AXIS Q6045-C, for instance, can capture the license plate of cars up to 275 m (900 ft.) away. The cameras can be automatically directed to 256 preset positions using guard tour.

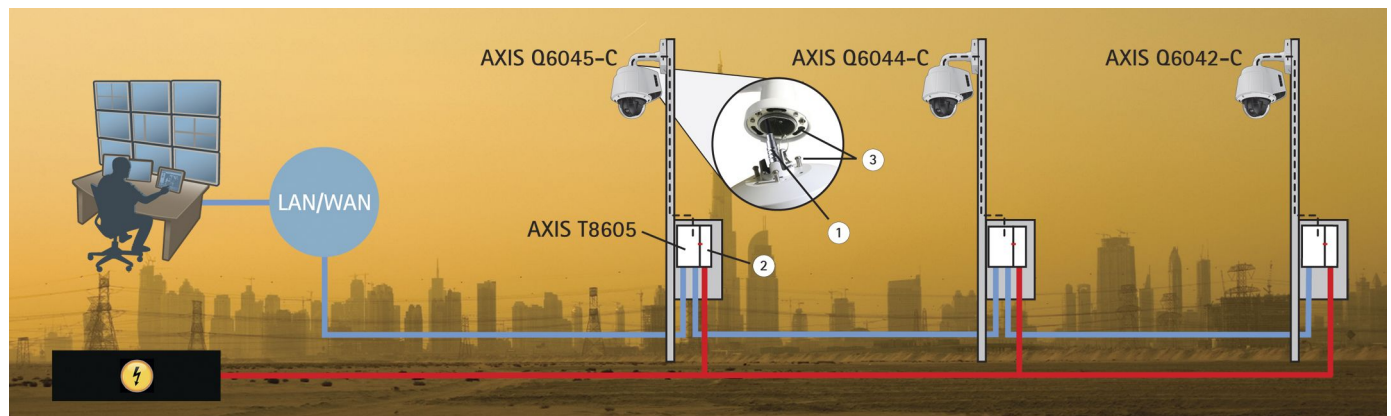
Engineered for handling extreme heat

AXIS Q60-C cameras use Peltier technology to increase the operating temperature to 75 °C (167 °F). The advanced climate control also handles rapid temperature changes to eliminate condensation on the clear dome cover. The system ensures that the cameras always operate at an optimal temperature to reduce wear and tear to maintain the cameras' lifetime.



Peltier element (1) draws heat out of or into the camera as needed; forms part of the barrier separating the camera unit from the outer environment. (2) Fan. (3) Heat sinks. (4) Air-tight camera compartment; no air flow between camera unit and outer part. (5) Heat inside is transferred out. (6) Warmer air out (7) Cooler air in.

System schematic



An AXIS Q60-C connects to the supplied AXIS T8605 Media Converter Switch using an IP66-rated multi-connector cable [1], which attaches to the camera with a simple click. Through the media converter switch, the multi-connector cable enables the camera to receive power (power supply [2] not included), and send and receive data to and from external alarm devices and the network. Two SFP slots and two RJ45 connectors in the media converter switch give installers the flexibility to network the cameras cost-effectively over long distances in a daisy chain or in a ring

topology for increased reliability in the event of a single point of failure. (IGMP filtering is not supported and ring topology requires a switch supporting IEEE 802.1D Spanning Tree Protocol). The RJ45 connectors can also be used for connection to complementary cameras such as a thermal camera or temporarily to a laptop to service the system locally. With bayonet connection [3], an AXIS Q60-C camera attaches easily to Axis' standard mounting accessories. Support for shock detection enables the camera to trigger an alarm if it has been hit.

Technical Specifications – AXIS Q60–C PTZ Dome Network Cameras

Models	AXIS Q6042–C 50 Hz, AXIS Q6042–C 60 Hz AXIS Q6044–C 50 Hz, AXIS Q6044–C 60 Hz AXIS Q6045–C 50 Hz, AXIS Q6045–C 60 Hz
Camera	
Image sensor	AXIS Q6042–C: 1/4" ExView HAD progressive scan CCD AXIS Q6044–C: 1/3" progressive scan CCD AXIS Q6045–C: 1/3" progressive scan CMOS
Lens	AXIS Q6042–C: f=3.3–119 mm, F1.4–4.2, autofocus Horizontal angle of view: 57.2°–1.7° AXIS Q6044–C: f=4.4–132 mm, F1.4–4.6, autofocus Horizontal angle of view: 62.9°–2.2° AXIS Q6045–C: f=4.45–89 mm, F1.6–2.9, autofocus Horizontal angle of view: 62.98°–3.49°
Day and night	Automatically removable infrared-cut filter
Minimum illumination	AXIS Q6042–C: Color: 0.5 lux at 30 IRE F1.4; B/W: 0.008 lux at 30 IRE F1.4 AXIS Q6044–C: Color: 0.2 lux at 30 IRE F1.4; B/W: 0.04 lux at 30 IRE F1.4 AXIS Q6045–C: Color: 0.6 lux at 30 IRE F1.6; B/W: 0.04 lux at 30 IRE F1.6
Shutter time	AXIS Q6042–C: 1/30000 s to 1.5 s (50 Hz), 1/30000 s to 0.5 s (60 Hz) AXIS Q6044–C: 1/10000 s to 1/4 s AXIS Q6045–C: 1/33000 s to 1/3 s (50 Hz), 1/33000 s to 1/4 s (60 Hz)
Pan/Tilt/Zoom	E-flip, 256 preset positions, Tour recording, Guard tour, Control queue, On-screen directional indicator Pan: 360° endless, 0.05°–450°/s; Tilt: 220°, 0.05°–450°/s AXIS Q6042–C: 36x optical zoom and 12x digital zoom, total 432x zoom AXIS Q6044–C: 30x optical zoom and 12x digital zoom, total 360x zoom AXIS Q6045–C: 20x optical zoom and 12x digital zoom, total 240x zoom
Video	
Video compression	H.264 Main and Baseline Profiles (MPEG-4 Part 10/AVC) Motion JPEG
Resolutions	AXIS Q6042–C: Extended D1 736x576 to 176x144 (50 Hz), Extended D1 752x480 to 176x120 (60 Hz) AXIS Q6044–C: 1280x720 (HDTV 720p) to 320x180 AXIS Q6045–C: 1920x1080 (HDTV 1080p) to 320x180
Frame rate	H.264: Up to 25/30 fps (50/60 Hz) in all resolutions Motion JPEG: Up to 25/30 fps (50/60 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Controllable frame rate and bandwidth VBR/CBR H.264
Image settings	Wide dynamic range (WDR), Manual shutter time, Compression, Color, Brightness, Sharpness, White balance, Exposure control, Exposure zones, Backlight compensation, Fine tuning of behavior at low light, Rotation, Text and image overlay, 32 individual 3D privacy masks, Image freeze on PTZ AXIS Q6042–C: Electronic image stabilization AXIS Q6044–C: Electronic image stabilization, Automatic defog AXIS Q6045–C: Highlight compensation
Network	
Security	Password protection, IP address filtering, HTTPS ^a encryption, IEEE 802.1X ^a network access control, Digest authentication, User access log
Supported protocols	IPv4/v6, HTTP, HTTPS ^a , SSL/TLS ^a , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP TM , SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS

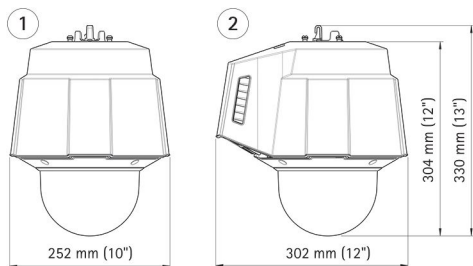
System integration	
Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at www.axis.com AXIS Video Hosting System (AVHS) with One-Click Camera Connection. ONVIF Profile S, specification at www.onvif.org
Intelligent video	Video motion detection, Autotracking, Active Gatekeeper, AXIS Camera Application Platform enabling installation of additional applications AXIS Q6044–C: Automatic defog AXIS Q6045–C: Basic analytics (not to be compared with third-party analytics): Object removed, Enter/exit detector, Fence detector, Object counter, Highlight compensation
Event triggers	Video motion detection, Shock detection, Fan, Heater, Temperature, Manual trigger, Autotracking, Moving, PTZ preset, Edge storage events, AXIS Camera Application Platform AXIS Q6045–C: Enter/exit, Fence detector, Object removed
Event actions	File upload: FTP, HTTP, network share and email Notification: email, HTTP and TCP PTZ preset, Guard tour, Autotracking, Day/night mode, Video recording to edge storage, Pre- and post-alarm video buffering
Built-in installation aids	Pixel counter
General	
Casing	IP66- and NEMA 4X-rated metal casing (aluminum), polycarbonate (PC) clear dome, sunshield (PC/ASA)
Memory	512 MB RAM, 128 MB Flash
Power	See specifications under AXIS T8605 Media Converter Switch
Connectors	IP66-rated multi-connector for DC power, Ethernet 10BASE-T/100BASE-TX and I/O, including 5 m (16 ft) cable
Edge storage	SD/SDHC/SDXC slot supporting memory card up to 64 GB (card not included); support for recording to dedicated network-attached storage (NAS)
Operating conditions	–20 °C to 75 °C (–4 °F to 167 °F) with active cooling Humidity 10–100% RH (condensing)
Storage conditions	–40 °C to 65 °C (–40 °F to 149 °F)
Approvals	EMC EN 55022 Class A, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, EN 55024, EN 50121-4, IEC 62236-4, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, C-tick AS/NZS CISPR 22 Class A, KCC KN22 Class A, KN24 Safety IEC/EN/UL 60950-1, IEC/EN/UL 60950-22 Environmental IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27 Camera compartment: IEC/EN 60529 IP66, NEMA 250 Type 4X MIL-STD-810G 500.5 – Low pressure, 501.5 – High temperature, 502.5 – Low temperature, 503.5 – Temperature shock, 505.5 – Solar radiation, 506.5 – Rain, 507.5 – Humidity, 509.5 – Salt fog, 510.5 – Sand and dust ^b
Weight	5.6 kg (12.4 lb)
Included accessories	AXIS T8605 Media Converter Switch with 2x RJ45, 2x SFP, 2x I/O, Power in, Bracket Mount DIN Clip, 5 m (16 ft) IP66-rated multi-connector cable, Installation Guide, Installation and Management Software CD, Windows decoder 1-user license
Video management software	AXIS Camera Companion (included), AXIS Camera Station and video management software from Axis' Application Development Partners (not included). For more information, see www.axis.com/products/video/software
Warranty	Axis 3-year warranty and AXIS Extended Warranty option, see www.axis.com/warranty

- a. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (ey@cryptsoft.com).
- b. Protected against entry of sand and dust. Clear/smoked dome cover may need to be replaced if exposed to sandblasts

More information is available at www.axis.com

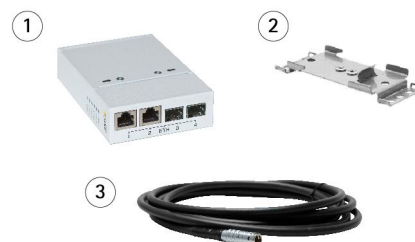
Dimensions

1. Front view
2. Side view



Included accessories

1. AXIS T8605
2. Bracket Mount DIN Clip
3. IP66-rated multi-connector cable, 5 m (16 ft)

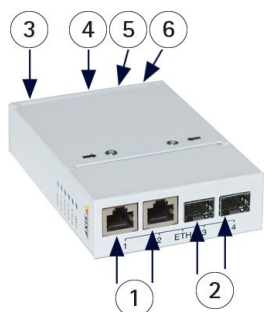


Optional accessories

1. AXIS T8008 PS12
2. AXIS T91A Mounting Accessories
3. AXIS T98A-VE Surveillance Cabinet
4. Network cable coupler IP66
5. AXIS T8310 Video Surveillance Control Board
6. Smoked dome cover



AXIS T8605 Media Converter Switch



Data rate	RJ45: 10/100 Mbps; SFP: 100/1000 Mbps	Operating conditions	-40 °C to 75 °C (-40 °F to 167 °F)
Network cables	Shielded category 5 or higher, all fiber	Storage conditions	-40 °C to 75 °C (-40 °F to 167 °F)
Connectors	2x RJ45 connectors [1] 2x SFP slots (e.g. for SFP optical fiber modules) [2] 2 configurable alarm input/output ports [3] Multi-connector cable [4] Ground screw [5] 1x power [6]	Approvals	EMC: EN 55022 Class A, EN 55024, VCCI, FCC Part 15 Class A with STP cabling, KCC Safety: IEC/EN/UL 60950-1, IEC/EN/UL 60950-22
Power	12.0–13.2 V DC, min. 75 W (power in from power supply)	Installation	Bracket Mount DIN Clip (included) for a 35 mm DIN rail
Display & indicators	Power 5x Network	Dimensions	150 x 100 x 30 mm (5.9" x 3.9" x 1.2")
Compliance	RoHS, REACH, WEEE, CE, EN 50022, IEC 60715, AS2756		

AXIS T8008 PS12 (Optional accessory)

Power in	90–264 V AC (operating) 115–230 V AC (nominal) 47–63 Hz	Approvals	EMI Class B, EN61000 Immunity, IEC 68-2-27, IEC 68-2-6/IEC 721-3-2, UL+CSA 60950-1 2nd Edition, UL+CSA 60601-1 2nd Edition, CB Scheme 60950-1, EN 61347-1/-2-13, IP64	Operating conditions	-40 °C to 75 °C (-40 °F to 167 °F)
Power out	12.5 V DC +/-0.2 V DC, 85 W			Storage conditions	-40 °C to 75 °C (-40 °F to 167 °F)
				Dimensions	178 x 102 x 38 mm (7" x 4" x 1.2")