

## **AXIS Q604 Series**

**AXIS Q6042-C PTZ Dome Network Camera**

**AXIS Q6044-C PTZ Dome Network Camera**

**AXIS Q6045-C PTZ Dome Network Camera**

## **Installation Guide**

## Legal Considerations

Video surveillance can be regulated by laws that vary from country to country. Check the laws in your local region before using this product for surveillance purposes.

This product includes one (1) H.264 decoder license. To purchase further licenses, contact your reseller.

## Liability

Every care has been taken in the preparation of this document. Please inform your local Axis office of any inaccuracies or omissions. Axis Communications AB cannot be held responsible for any technical or typographical errors and reserves the right to make changes to the product and manuals without prior notice. Axis Communications AB makes no warranty of any kind with regard to the material contained within this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Axis Communications AB shall not be liable nor responsible for incidental or consequential damages in connection with the furnishing, performance or use of this material. This product is only to be used for its intended purpose.

## Intellectual Property Rights

Axis AB has intellectual property rights relating to technology embodied in the product described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the patents listed at [www.axis.com/patent.htm](http://www.axis.com/patent.htm) and one or more additional patents or pending patent applications in the US and other countries.

This product contains licensed third-party software. See the menu item "About" in the product's user interface for more information.

This product contains source code copyright Apple Computer, Inc., under the terms of Apple Public Source License 2.0 (see [www.opensource.apple.com/aps/](http://www.opensource.apple.com/aps/)). The source code is available from <https://developer.apple.com/bonjour/>

## Equipment Modifications

This equipment must be installed and used in strict accordance with the instructions given in the user documentation. This equipment contains no user-serviceable components. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.

## Trademark Acknowledgments

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SD, SDHC and SDXC are trademarks or registered trademarks of SD-3C, LLC in the United States, other countries or both. Also, miniSD, microSD, miniSDHC, microSDHC, microSDXC are all trademarks or registered trademarks of SD-3C, LLC in the United States, other countries or both.

## Regulatory Information

### Europe

**CE** This product complies with the applicable CE marking directives and harmonized standards:

- Electromagnetic Compatibility (EMC) Directive 2004/108/EC. See *Electromagnetic Compatibility (EMC)* on page 2.
- Low Voltage (LVD) Directive 2006/95/EC. See *Safety* on page 3.
- Restrictions of Hazardous Substances (RoHS) Directive 2011/65/EU. See *Disposal and Recycling* on page 3.

A copy of the original declaration of conformity may be obtained from Axis Communications AB. See *Contact Information* on page 3.

### Electromagnetic Compatibility (EMC)

This equipment has been designed and tested to fulfill applicable standards for:

- Radio frequency emission when installed according to the instructions and used in its intended environment.
- Immunity to electrical and electromagnetic phenomena when installed according to the instructions and used in its intended environment.

### USA

This equipment has been tested using a shielded network cable (STP) and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The product shall be connected using a shielded network cable (STP) that is properly grounded.

### Canada

This Class A digital apparatus complies with Canadian ICES-003. The product shall be connected using a shielded network cable (STP) that is properly grounded. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada. Le produit doit être connecté à l'aide d'un câble réseau blindé (STP) qui est correctement mis à la terre.

### Europe

This digital equipment fulfills the requirements for RF emission according to the Class A limit of EN 55022. The product shall be connected using a shielded network cable (STP) that is properly grounded. Notice! This is a Class A product. In a domestic environment this product may cause RF interference, in which case the user may be required to take adequate measures.

This product fulfills the requirements for emission and immunity according to EN 50121-4 and IEC 62236-4 railway applications.

This product fulfills the requirements for immunity according to EN 61000-6-1 residential, commercial and light-industrial environments.

This product fulfills the requirements for immunity according to EN 61000-6-2 industrial environments.

This product fulfills the requirements for immunity according to EN 55024 office and commercial environments

## Australia/New Zealand

This digital equipment fulfills the requirements for RF emission according to the Class A limit of AS/NZS CISPR 22. The product shall be connected using a shielded network cable (STP) that is properly grounded. Notice! This is a Class A product. In a domestic environment this product may cause RF interference, in which case the user may be required to take adequate measures.

## Japan

この装置は、クラスA 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。本製品は、シールドネットワークケーブル(STP)を使用して接続してください。また適切に接地してください。

## Safety

This product complies with IEC/EN/UL 60950-1 and IEC/EN/UL 60950-22, Safety of Information Technology Equipment. The product shall be grounded either through a shielded network cable (STP) or other appropriate method.

The power supply used with this product shall fulfill the requirements for Safety Extra Low Voltage (SELV) according to IEC/EN/UL 60950-1.

## Disposal and Recycling

When this product has reached the end of its useful life, dispose of it according to local laws and regulations. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. In accordance with local legislation, penalties may be applicable for incorrect disposal of this waste.

## Europe



■ This symbol means that the product shall not be disposed of together with household or commercial waste. Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) is applicable in the European Union member states. To prevent potential harm to human health and the environment, the product must be disposed of in an approved and environmentally safe recycling process. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. Businesses should contact the product supplier for information about how to dispose of this product correctly.

This product complies with the requirements of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

## China



■ This product complies with the requirements of the legislative act Administration on the Control of Pollution Caused by Electronic Information Products (ACPEIP).

## Contact Information

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Sweden

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Fax: +46 46 13 61 30

[www.axis.com](http://www.axis.com)

## Support

Should you require any technical assistance, please contact your Axis reseller. If your questions cannot be answered

immediately, your reseller will forward your queries through the appropriate channels to ensure a rapid response. If you are connected to the Internet, you can:

- download user documentation and software updates
- find answers to resolved problems in the FAQ database. Search by product, category, or phrase
- report problems to Axis support staff by logging in to your private support area
- chat with Axis support staff (selected countries only)
- visit Axis Support at [www.axis.com/techsup/](http://www.axis.com/techsup/)

## Learn More!

Visit Axis learning center [www.axis.com/academy/](http://www.axis.com/academy/) for useful trainings, webinars, tutorials and guides.



## Safety Information

Read through this Installation Guide carefully before installing the product. Keep the Installation Guide for future reference.

### Hazard Levels

**▲DANGER**

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**▲WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**▲CAUTION**

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

**NOTICE**

Indicates a situation which, if not avoided, could result in damage to property.

### Other Message Levels

**Important**

Indicates significant information which is essential for the product to function correctly.

**Note**

Indicates useful information which helps in getting the most out of the product.

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### Safety Instructions

#### **⚠WARNING**

- The Axis product shall be installed by a trained professional.

#### **NOTICE**

- The Axis product shall be used in compliance with local laws and regulations.
- Store the Axis product in a dry and ventilated environment.
- Avoid exposing the Axis product to shocks or heavy pressure.
- Do not install the product on unstable brackets, surfaces or walls.
- Use only applicable tools when installing the Axis product. Excessive force could cause damage to the product.
- Do not use chemicals, caustic agents, or aerosol cleaners. Use a clean cloth dampened with pure water for cleaning.
- Use only accessories that comply with technical specification of the product. These can be provided by Axis or a third party.
- Use only spare parts provided by or recommended by Axis.
- Do not attempt to repair the product by yourself. Contact Axis support or your Axis reseller for service matters.

### Transportation

#### **NOTICE**

- Keep the protective packaging. When transporting the Axis product, the protective packaging shall be replaced in its original position.
- When transporting the Axis product, use the original packaging or equivalent to prevent damage to the product.

### Battery

The Axis product uses a 3.0 V BR/CR2032 lithium battery as the power supply for its internal real-time clock (RTC). Under normal conditions this battery will last for a minimum of five years.

Low battery power affects the operation of the RTC, causing it to reset at every power-up. When the battery needs replacing, a log message will appear in the product's server report. For more information about the server report, see the product's setup pages or contact Axis support.

The battery should not be replaced unless required, but if the battery does need replacing, contact Axis support at [www.axis.com/techsup](http://www.axis.com/techsup) for assistance.

**⚠WARNING**

- Risk of explosion if the battery is incorrectly replaced.
- Replace only with an identical battery or a battery which is recommended by Axis.
- Dispose of used batteries according to local regulations or the battery manufacturer's instructions.

**Dome Cover****NOTICE**

- Be careful not to scratch, damage or leave fingerprints on the dome cover because this could decrease image quality. If possible, keep the protective plastic on the dome cover until the installation is complete.
- Do not clean a dome cover that looks clean to the eye and never polish the surface. Excessive cleaning could damage the surface.
- For general cleaning of the dome cover it is recommended to use a non-abrasive, solvent-free neutral soap or detergent mixed with pure water and a soft, clean cloth. Rinse well with pure lukewarm water. Dry with a soft, clean cloth to prevent water spotting.
- Never use harsh detergents, gasoline, benzene or acetone etc. and avoid cleaning the dome cover in direct sunlight or at elevated temperatures.





## Installation Guide

This Installation Guide provides instructions for installing AXIS Q6042-C, AXIS Q6044-C, or AXIS Q6045-C PTZ Dome Network Camera on your network. For other aspects of using the product, see the User Manual available at [www.axis.com](http://www.axis.com)

## Installation Steps

1. Make sure the package contents, tools and other materials necessary for the installation are in order. See *page 9*.
2. Study the hardware overview. See *page 10*.
3. Study the specifications. See *page 18*.
4. Install the hardware. See *page 22*.
5. Access the product. See *page 32*.

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## Package Contents

- Q6042-C/Q6044-C/Q6045-C PTZ Dome Network Camera
- Clear dome cover (premounted)
- AXIS T8605 Media converter switch
- Multi-connector cable (IP66), 7 m (23 ft)
- Installation and Management Software CD
- Printed materials
  - Installation Guide (this document)
  - Extra serial number label (2x)
  - AVHS Authentication key

## Recommended Tools

- Wire stripping tool
- Phillips screwdriver PH2 – if replacing the dome cover
- Torx screwdriver T20 – for cleaning the outer heat sink when necessary
- Torx screwdriver T30 – for installing the camera on a compatible bracket from AXIS T91A Mounting Accessories and if replacing the dome cover

## Optional Accessories

- Smoked dome cover
- Power supply

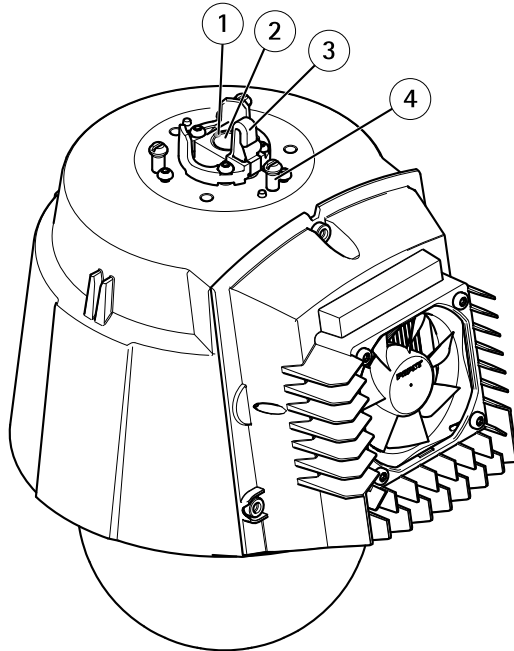
## AXIS Q604 Series

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- AXIS T91A Mounting Accessories

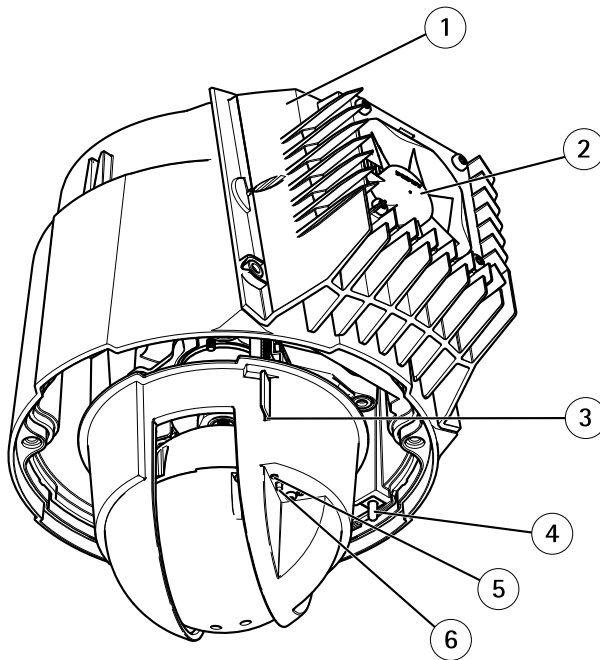
For information about available accessories, see [www.axis.com](http://www.axis.com)

### Hardware Overview



*Top view*

- 1 Alignment indicator
- 2 Multi-connector
- 3 Hook for safety wire
- 4 Unit holder (3x)



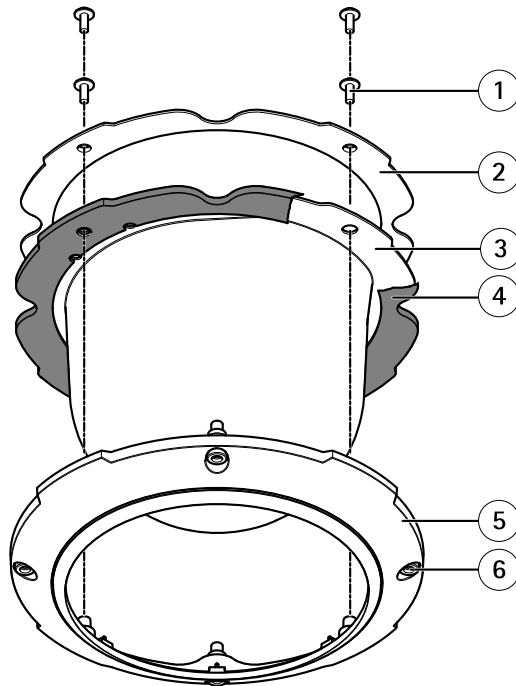
*Bottom view*

- 1 Cooling system
- 2 Fan
- 3 SD card slot (SDHC)
- 4 Power button (for Factory Default only)
- 5 Control button
- 6 Status LED indicator

## AXIS Q604 Series

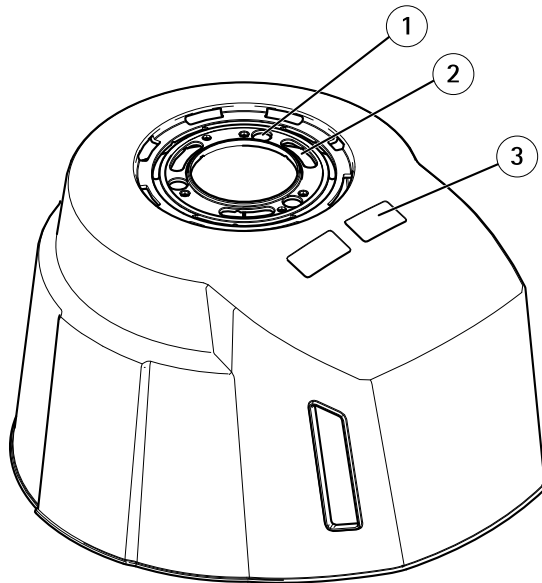
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### Dome Cover



- 1 Dome bracket screw PH2 (4x)
- 2 Dome bracket
- 3 Dome cover
- 4 Rubber gasket
- 5 Dome ring
- 6 Dome ring screw T30 (4x)

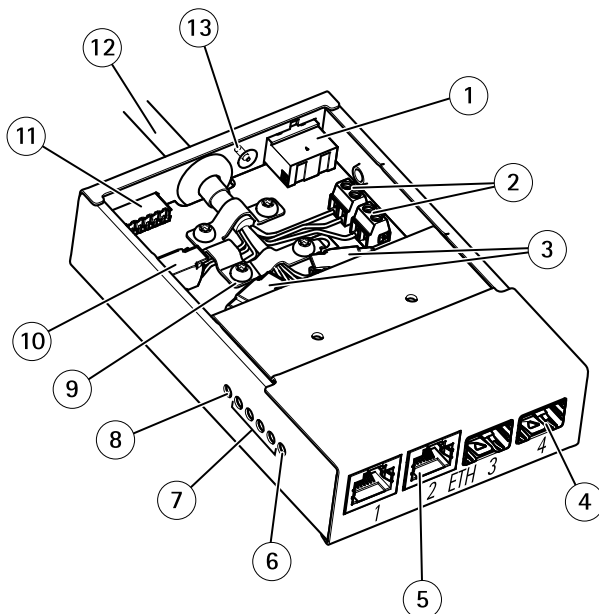
## Sunshield



- 1 Screw hole (3x)
- 2 Hole for unit holder (3x)
- 3 Part number (P/N) & Serial number (S/N)

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### Media Converter Switch



- 1 Power connector (DC input)
- 2 Power connector (DC output)
- 3 Network connector (internal)
- 4 Network slot SFP (external) (2x)
- 5 Network connector RJ45 (external) (2x)
- 6 Camera LED indicator
- 7 Network LED indicator (4x)
- 8 Power LED indicator
- 9 Ground clip
- 10 I/O connector (internal)
- 11 I/O connector (external)
- 12 Multi-connector cable
- 13 Ground screw

## LED Indicators

LED	Color	Indication
Status	Unlit	Connection and normal operation
	Amber	Steady during startup. Flashes during firmware upgrade.
	Amber/red	Flashes amber/red if network connection is unavailable or lost.
	Red	Flashes red for firmware upgrade failure.
	Green	Shows steady green for 10 seconds for normal operation after restart.

## Media Converter Switch LED Indicators

LED	Color	Indication
Power	Unlit	DC power unconnected or current protection engaged (power overload)
	Green	DC power connected.
Network (4x)	Amber	10 Mbit connection. Flashes during activity.
	Green	100/1000 Mbit connection. Flashes during activity.
Camera	Green	100 Mbit connection. Flashes during activity.

## Connectors and Buttons

For specifications and operating conditions, see *page 18*.

### Multi-connector

Terminal connector for connecting the supplied media converter switch, which provides the following signals:

- DC Power
- Network (Ethernet 10/100Base-T)
- Input/Output (I/O)

The supplied multi-connector cable is required in order to maintain the product's IP rating, see *Multi-Connector Cable on page 17*.

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### SD Card Slot

An SD card (not included) can be used for local recording with removable storage. For more information, see *Specifications on page 18*.

#### **NOTICE**

To prevent corruption of recordings, the SD card should be unmounted before removal. To unmount, go to **Setup > System Options > Storage > SD Card** and click **Unmount**.

#### **Note**

For SD card recommendations see [www.axis.com](http://www.axis.com)

### Control Button

The control button is used for:

- Resetting the product to factory default settings. See *page 34*.
- Connecting to an AXIS Video Hosting System service or AXIS Internet Dynamic DNS Service. For more information about these services, see the User Manual.

### Power Button

Press and hold the power button to temporarily power the product when the dome cover is removed. The power button is also used with the control button to reset the camera to factory default settings. See *page 34*.

### Media Converter Switch Connectors

For specifications, see *page 18*.

#### **NOTICE**

The product shall be connected using a shielded network cable (STP) or an optical fiber cable. All cables connecting the product to the network shall be intended for their specific use. Make sure that the network devices are installed in accordance with the manufacturer's instructions. For information about regulatory requirements, see *Electromagnetic Compatibility (EMC) on page 2*.

#### **Important**

The media converter switch does not support hotswapping. Disconnect power from the switch before swapping cameras. An attempt to hotswap could cause the switch to freeze, in which case it must be restarted.

**Power connector (DC input)** – 2-pin terminal block for power input.

**Power connector (DC output)** – Two 2-pin terminal block for power output (pin 4 is not used).



**Network connector RJ45 (external)** – Two RJ45 connectors (10/100Base-T) for network connectivity.

**Network slot SFP (external)** – Two SFP slots (100Base-FX/1000Base-X) for network connectivity.

Each RJ45 and SFP port has its own dip switch. The dip switches control how the port forwards data. For more information, see the User Manual.

Dip switch position		Description of use
Default (middle)	B	When connecting to the network, directly or through a router or network switch.
Left	A	When connecting to a camera or a device that is not intended for viewing data.
Right	C	When connecting to another media converter switch.

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**Network connector (internal)** – Two 2-pin Ethernet terminal blocks.

**I/O connector (external)** – 6-pin configurable I/O terminal block, which is connected to the camera through the multi-connector cable. Use with external devices in combination with, for example, tampering alarms, motion detection, event triggering, time lapse recording and alarm notifications. In addition to the 0 V DC reference point and power (DC output), the I/O connector provides the interface to:

- **Digital output** – For connecting external devices such as relays and LEDs. Connected devices can be activated by the VAPIX® Application Programming Interface, output buttons on the Live View page or by an Action Rule. The output will show as active (shown under **System Options > Port & Devices > Port Status**) if the alarm device is activated.
- **Digital input** – An alarm input for connecting devices that can toggle between an open and closed circuit, for example: PIRs, door/window contacts, glass break detectors, etc. When a signal is received the state changes and the input becomes active (shown under **System Options > Port & Devices > Port Status**).

**I/O connector (internal)** – 2-pin I/O terminal block.

## Multi-Connector Cable

The supplied multi-connector cable is required in order to maintain the camera's IP rating.

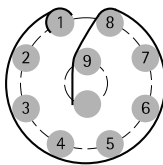
The multi-connector cable is connected to the camera's multi-connector, see *Hardware Overview on page 10*.

The wires are connected to the supplied media converter switch, see *Media Converter Switch on page 14*.

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The cable provides the following signals:

- DC power to camera
- Network (Ethernet 10/100Base-T)
- Input/Output (I/O)



Function	Pin – wire	Notes	Specifications
Configurable (Input or Output)	2 – blue 7 – yellow	Digital input – Connect to pin 8 to activate, or leave floating (unconnected) to deactivate.	0 to max 30 V DC
		Digital output – Connected to pin 1 when activated, floating (unconnected) when deactivated. If used with an inductive load, e.g. a relay, a diode must be connected in parallel with the load, for protection against voltage transients.	0 to max 30 V DC, open drain, 100 mA
RX+	3 – green/white	Ethernet – receiving	
RX-	4 – green	Ethernet – receiving	
TX+	5 – orange/white	Ethernet – transmitting	
TX-	6 – orange	Ethernet – transmitting	
0 V DC (-)	8 – black		0 V DC
DC output (12 V)	1, 9 – red	Used to power camera	12–13.2 V DC Max load = 6 A

## Specifications

### Operating Conditions

The Axis product is intended for outdoor use.

Classification	
AXIS Q6042-C/Q6044-C/Q6045-C	IEC 60721-3-4 Class 4K4H, 4M4 IEC 60529 IP66 NEMA 250 Type 4x MIL-STD 810G 500.5, 501.5, 502.5, 503.5, 505.5, 506.5, 507.5, 509.5, 510.5 <sup>1</sup> , 514.6

1. Protected against entry of sand and dust. Clear/smoked dome cover may need to be replaced if exposed to sandblasts.

Temperature	
AXIS Q6042-C/Q6044-C/Q6045-C	-20 °C to 75 °C (-4 °F to 167 °F) with active cooling

Humidity	
AXIS Q6042-C/Q6044-C/Q6045-C	10–100% RH (non-condensing)

## Storage Conditions

Temperature	
AXIS Q6042-C/Q6044-C/Q6045-C	-20 °C to 75 °C (-4 °F to 167 °F)

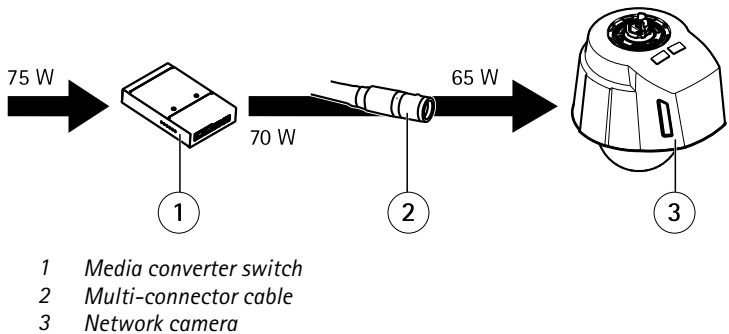
## Electrical Specifications

### NOTICE

For confirmed compliance with the requirements for Safety Extra Low Voltage (SELV) and Limited Power Source (LPS), use the power supply (sold separately) recommended by Axis. For information about compatible power accessories, see [www.axis.com](http://www.axis.com)

Product	Function	Description
Network camera	Input power	65 W (min)
Media converter switch	Input voltage	12.0–13.2 V DC
	Input current	6.25 A (min)
	Input power	75 W (min)
	Available output power	70 W (min)
	Nominal output voltage	12.5 V DC

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**Connectors**

**SD Card Slot**

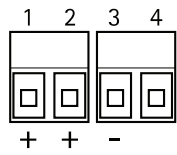
Supports SD cards with up to 64 GB of storage. For best recording performance, use an SDHC or SDXC card with speed class 10.

**Media Converter Switch Connectors**

**Camera Connectors**

**Power connector**

Two 2-pin terminal blocks for power output (pin 4 is not used).



Function		Pin	Notes	Specifications
DC output	12 V DC	1, 2	Power out to camera	Max load = 6.5 A 12.0–13.2 V DC, min 70 W
	0 V DC (-)	3		0 V DC
	N/a	4	N/a	

## Network connector

Two 2-pin Ethernet terminal blocks.



## I/O terminal connector

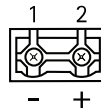
2-pin terminal block.



## External Connectors

### Power connector

2-pin terminal block for power input.

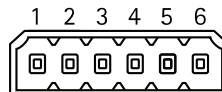


Function		Pin	Notes	Specifications
DC input	0 V DC (-)	1		0 V DC
	12 V DC	2	Power in from power supply (sold separately)	Max load = 7 A 12.0–13.2 V DC, min 75 W

## I/O terminal connector

6-pin terminal blocks for:

- Digital Input/Output
- Power (DC output)
- 0 V DC (-)



Function	Pin	Notes	Specifications
0 V DC (-)	1, 4, 6		0 V DC

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DC output	2	Power out	12 V DC, 50 mA
Configurable I/O 1 (Input or Output)	3	Digital input	0 to max 30 V DC
		Digital output (transistor – open collector)	0 to max 30 V DC, open drain, 100 mA
Configurable I/O 2 (Input or Output)	5	Digital input	0 to max 30 V DC
		Digital output (transistor – open collector)	0 to max 30 V DC, open drain, 100 mA

## Install the Hardware

### NOTICE

- The product shall be connected using a shielded network cable (STP) or an optical fibre cable. All cables connecting the product to the network shall be intended for their specific use. Make sure that the network devices are connected in accordance with the manufacturer's instructions. For information about regulatory requirements, see *Regulatory Information on page 2*.
- The product has a dehumidifying membrane for maintaining low humidity levels inside the dome. To avoid condensation, do not disassemble the product in rain or damp conditions.
- Be careful not to scratch, damage or leave fingerprints on the dome cover because this could decrease image quality. If possible, keep the protective plastic on the dome cover until the installation is complete.

The Axis product can be installed with the cables routed through or along the wall or roof.

In areas where the temperature is above 60 °C (140 °F), the product shall be placed in a restricted access location.

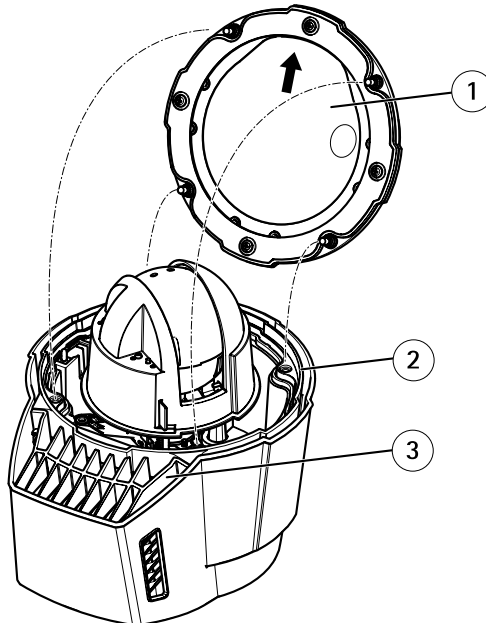
Read all the instructions before installing the product. Some installation steps would benefit from being completed together because they require removal of the dome cover.

- Remove the protective packaging between the camera and the sunshield before installing the camera.
- A smoked dome cover can be purchased from your Axis reseller. To replace the dome cover, see *page 23*.
- A standard or high capacity SD card (not included) can be used to store recordings locally in the product. To install an SD card, see *page 24*.
- To install the power supply (sold separately) and the supplied media converter switch, see *page 24*.
- To install the network camera using a compatible bracket from AXIS T91A Mounting Accessories (sold separately), see *Install the Network Camera*.

## Replace the Dome Cover

Replacing the dome cover is only necessary if you want to use a smoked dome cover or if the dome cover is scratched or damaged. Smoked dome covers and spare clear dome covers can be purchased from your Axis reseller.

1. Loosen the dome ring screws and remove the dome cover.
2. Remove the dome bracket screws and remove the dome bracket and the dome cover from the dome ring.
3. Make sure the rubber gasket is fitted correctly on the dome cover.
4. Align the bulge on the dome cover with one of the logotypes on the dome ring.
5. Attach the dome bracket and the dome cover to the dome ring and tighten the screws (torque 1.2 Nm).
6. To install an SD card (not included), see *Install an SD Card on page 24*.
7. To attach the dome cover to the top cover, align the bulge on the dome cover with the cooling system on the camera unit and tighten the screws (torque 1.5 Nm).



- 1 Dome cover
- 2 Top cover
- 3 Cooling system

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### Install an SD Card

It is optional to install a standard or high capacity SD card (not included), which can be used for local recording with removable storage.

1. Loosen the dome ring screws and remove the dome cover.
2. Insert an SD card (not included) into the SD card slot.
3. To attach the dome cover to the top cover, align the bulge on the dome cover with the cooling system on the camera unit and tighten the screws (torque 1.5 Nm).

#### **NOTICE**

To prevent corruption of recordings, the SD card should be unmounted before it is ejected. To unmount, go to **Setup > System Options > Storage > SD Card** and click **Unmount**.

### Install the Power Supply and the Media Converter Switch

The supplied media converter switch enables the multi-connector cable to send power from the power supply (sold separately) and to send and receive data to and from external alarm devices and the network.

#### **NOTICE**

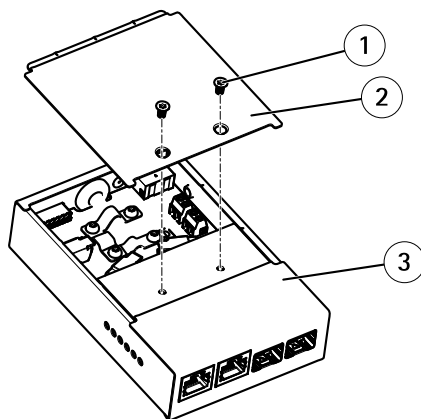
- Make sure the connections to the mains supply and conduits have been installed by a trained professional, according to the manufacturer's instructions and in compliance with local regulations.
- The power supply (sold separately) and the media converter switch shall be installed in an environment protected against dust and water, for example indoors or in an appropriate cabinet.
- The product shall be connected using a shielded network cable (STP) or an optical fiber cable. All cables connecting the product to the network shall be intended for their specific use. Make sure that the network devices are installed in accordance with the manufacturer's instructions. For information about regulatory requirements, see *Regulatory Information on page 2*.

#### **Important**

Axis can only guarantee full functionality with the supplied media converter switch. No other devices are supported.

1. Make sure the mains supply is switched off.
2. Mount the power supply and the media converter switch on the wall or, if applicable, attach them to a DIN rail in the cabinet. If drilling is required, make sure to use drill bits, screws, and plugs that are appropriate for the material.
3. Loosen the screws and remove the cover from the media converter switch.

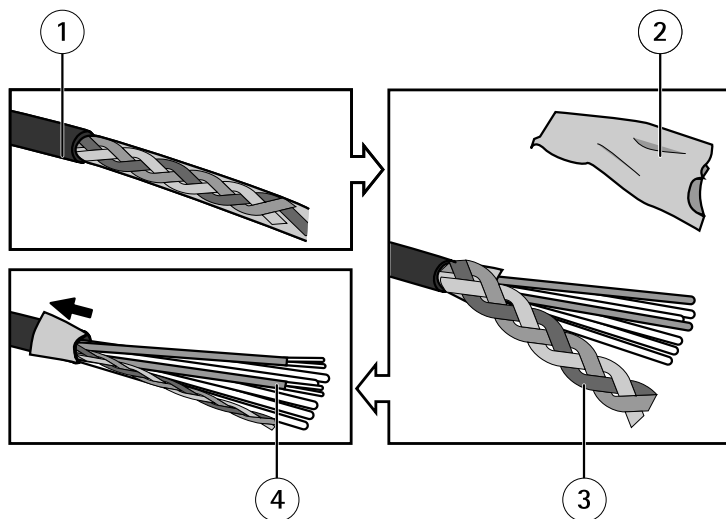




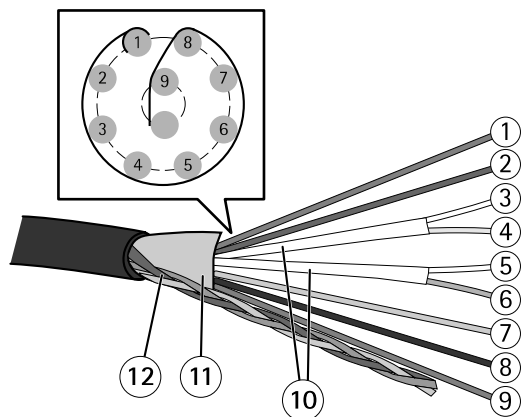
- 1 Screw (2x)
- 2 Cover
- 3 Media converter switch

- 4. Strip off 40 mm (1.57 in) of the multi-connector cable jacket.
- 5. Leave the braided shield intact, but cut off 30 mm (1.18 in) of the outer foil shield.
- 6. Fold back the leftover outer foil shield and twist the braided shield into a coil.
- 7. Cut off about 7–8 mm (0.27–0.32 in) of the Ethernet wire foil shields.
- 8. Strip off about 4–5 mm (0.16–0.20 in) of the power wire jackets.

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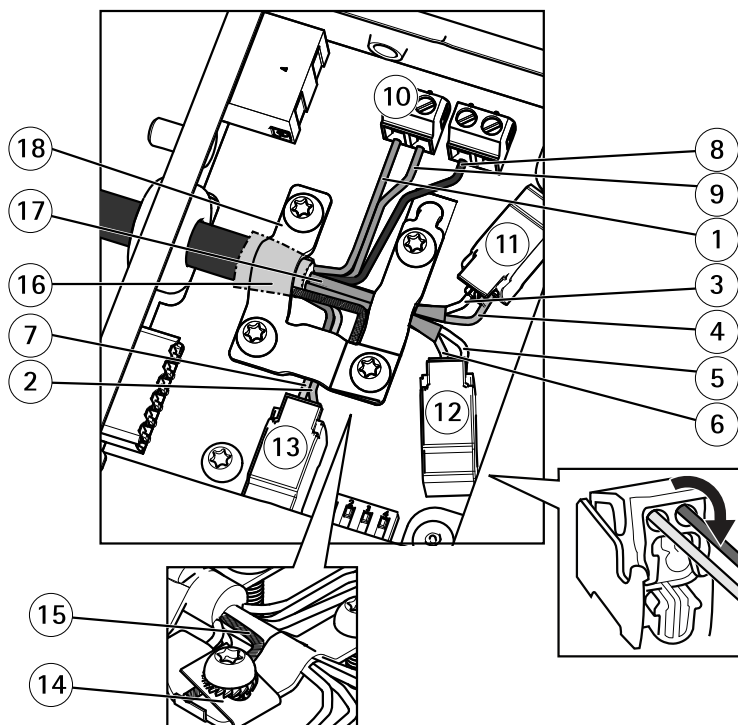
- 1 Multi-connector cable jacket
- 2 Outer foil shield
- 3 Braided shield
- 4 Ethernet wire foil shield (2x)



- 1 Power wire (red)
- 2 Digital I/O wire (blue)
- 3 Ethernet wire (green/white)
- 4 Ethernet wire (green)
- 5 Ethernet wire (orange/white)

- 6 Ethernet wire (orange)
- 7 Digital I/O wire (yellow)
- 8 Ground wire (black)
- 9 Power wire (red)
- 10 Ethernet wire foil shield (2x)
- 11 Outer foil shield
- 12 Braided shield coil

9. Connect the network and I/O wires to the internal network and I/O connectors. Open the lid, insert the wires and close.
10. Connect the ground and power wires to the power connector (DC output).



- 1 Power wire (red)
- 2 Digital I/O wire (blue)
- 3 Ethernet wire (green/white)
- 4 Ethernet wire (green)
- 5 Ethernet wire (orange/white)

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- 6 Ethernet wire (orange)
- 7 Digital I/O wire (yellow)
- 8 Ground wire (black)
- 9 Power wire (red)
- 10 Power connector (DC output)
- 11 Ethernet connector (internal)
- 12 Ethernet connector (internal)
- 13 I/O connector (internal)
- 14 Ground clip
- 15 Braided shield coil
- 16 Outer foil shield
- 17 Ethernet wire shield (2x)
- 18 Clamp

11. Make sure the clamp is in place, insert the braided shield coil into the ground clip and tighten the screws.

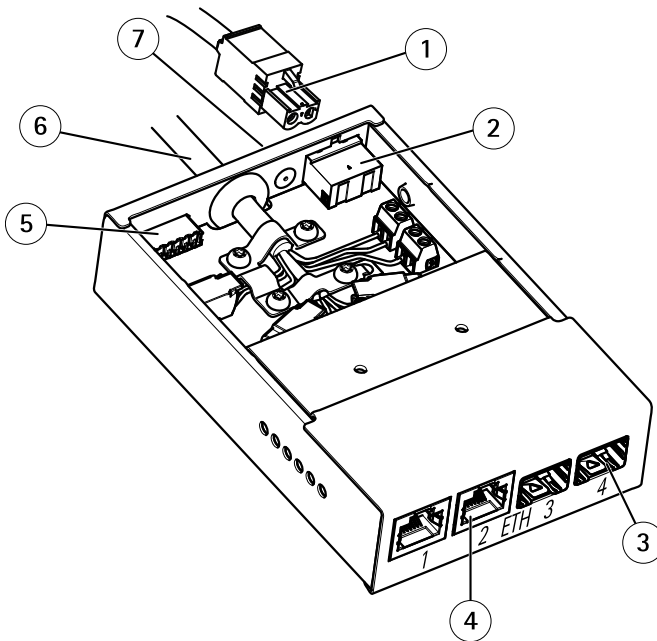
### NOTICE

- The shields and the clamp surfaces shall be in full contact with each other so that the multi-connector cable is grounded.
- Make sure that the multi-connector cable jacket is firmly secured by the clamp.
- Make sure all surfaces and contacts are clean and free from scrap shield material.

12. Connect the network cables to the external network connectors (RJ45, SFP) as required.

### Note

An SFP module (not included) has to be used when connecting an optical fiber cable.



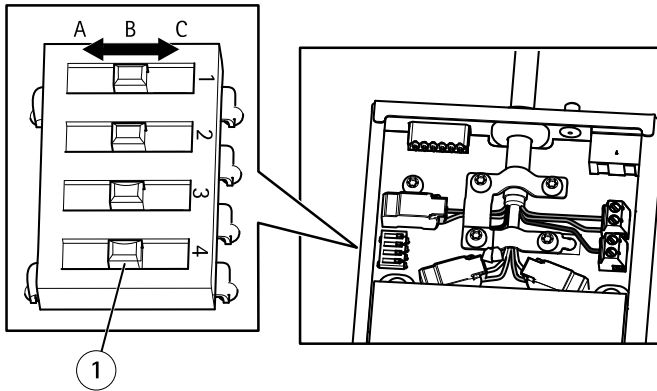
- 1 Power cable (DC input)
- 2 Power connector (DC input)
- 3 Network connector SFP (external) (2x)
- 4 Network connector RJ45 (external) (2x)
- 5 I/O connector (external)
- 6 Multi-connector cable IP66
- 7 Ground screw

13. If applicable, connect an I/O device to the external I/O connector.
14. Connect the power cable (DC input) to the power connector (DC input) via the terminal block plug.
15. Attach the ground wire to the ground screw.
16. If connecting several media converter switches in a daisy chain, set the dip switch of each outgoing network connector port that connects to another media converter switch to position C.  
Leave the dip switch in its default position (position B) when connecting the port directly to the network. For more information, see *Media Converter Switch Connectors* on page 16 and the User Manual.

**Important**

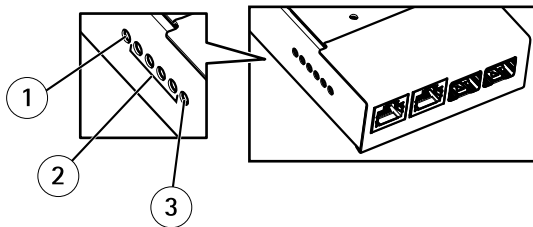
If the system is not defined, use the default dip switch setting (position B).

## AXIS Q604 Series



1 Dip switch (4x)

17. Attach the cover to the media converter switch.
18. Switch on the mains supply.
19. Make sure the LED indicators on the media converter switch indicate the correct conditions. For more information, see *Media Converter Switch LED Indicators* on page 15.



- 1 Power LED indicator
- 2 Network LED indicator (4x) ETH 1/2/3/4
- 3 Camera LED indicator

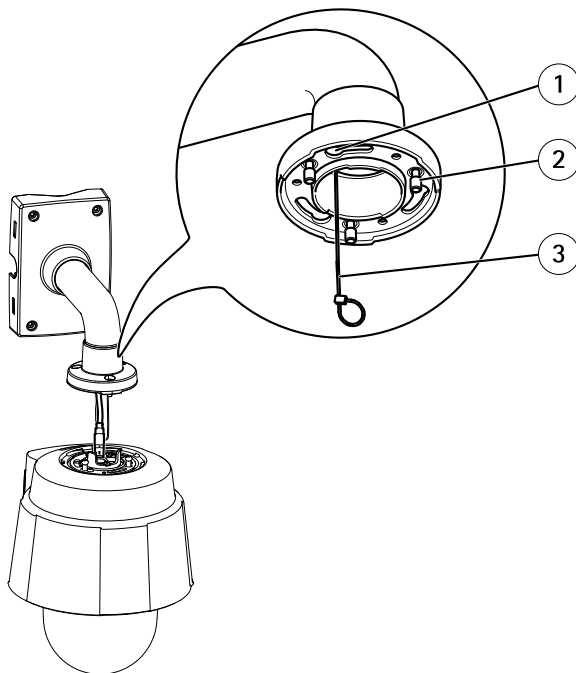
## Install the Network Camera

### NOTICE

To comply with the IP66-rated design of the camera and maintain the IP66 protection, the supplied multi-connector cable shall be used.

1. Install the selected bracket (sold separately) according to the instructions supplied with the bracket. If drilling is required, make sure to use drill bits, screws, and plugs that are appropriate for the material. See [www.axis.com](http://www.axis.com) for information on available mounting accessories.

2. Route the multi-connector cable through the holes in the mounting bracket.
3. Secure the camera using the supplied safety wire.



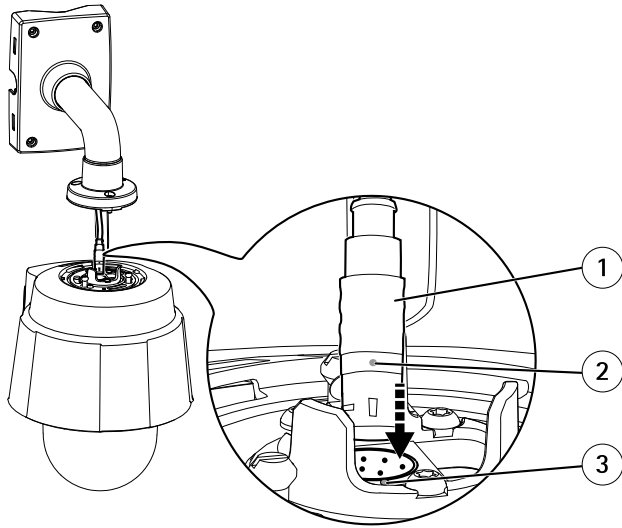
*Mounting example (wall bracket sold separately)*

- 1 Slot for unit holders (3x)
  - 2 Screw T30 (2x)
  - 3 Safety wire
4. Remove the protection cap covering the multi-connector on the camera.
  5. Connect the multi-connector cable to the connector on the camera. Use the alignment indicators to find the correct position.

**NOTICE**

Be careful not to damage the multi-connector cable when connecting it.

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*Mounting example (wall bracket sold separately)*

- 1 Multi-connector cable
- 2 Alignment indicator – multi-connector cable
- 3 Alignment indicator – camera

- 6. Slide the unit holders on the camera into the slots in the mounting bracket and rotate the camera unit.
- 7. Secure the network camera to the mounting bracket by tightening the screws.

## Access the Product

Use the tools provided on the Installation and Management Software CD to assign an IP address, set the password and access the video stream. This information is also available from the support pages on [www.axis.com/techsup/](http://www.axis.com/techsup/)

## Clean the Outer Heat Sink

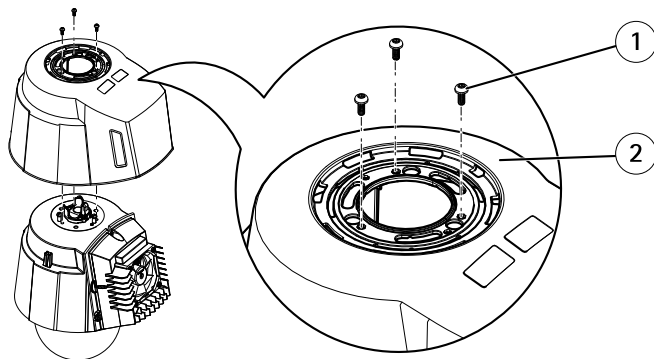
Dust and particle buildup could affect the performance of the cooling system. To maintain the performance level, the outer heat sink in the camera's cooling system may need occasional or regular cleaning.



**⚠CAUTION**

The heat sink could be hot. Be careful when touching the heat sink and the heat sink cover. If required, let the camera cool before touching it.

1. Disconnect the multi-connector cable.
2. Loosen the screws and remove the sunshield.

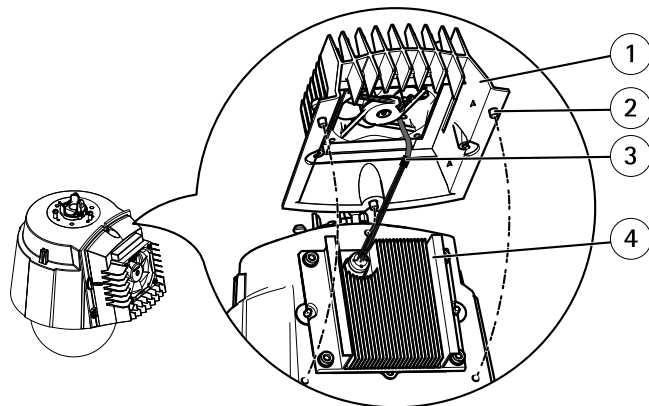


- 1 Screw T20 (3x)
- 2 Sunshield

3. Remove the screws (Torx T30) and lift the heat sink cover.

**NOTICE**

Do not strain the fan cables or let the heat sink cover hang by the fan cables.



- 1 Heat sink cover

## AXIS Q604 Series

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- 2 Screw T30 (3x)
- 3 Fan cables
- 4 Heat sink

- 4. Remove dust and specks of dirt by blowing on the heat sink, for example by using a small air compressor or a can of compressed air. The heat sink may also be rinsed with pure water.
- 5. Put the heat sink cover back in its original position and tighten the screws (torque  $2.4 \pm 0.2$  Nm).
- 6. Put the sunshield back in its original position and tighten the screws (torque  $1.2 \pm 0.1$  Nm).
- 7. Connect the multi-connector cable to the connector on the camera.

## Reset to Factory Default Settings

### Important

Reset to factory default should be used with caution. A reset to factory default will reset all settings, including the IP address, to the factory default values.

### Note

The installation and management software tools are available on the CD supplied with the product and from the support pages on [www.axis.com/techsup](http://www.axis.com/techsup)

To reset the product to the factory default settings:

- 1. Press and hold the control button and the power button for about 15–30 seconds until the status LED indicator flashes amber. See *Hardware Overview on page 10*.
- 2. Release the control button but continue to hold down the power button until the status LED indicator turns green.
- 3. Release the power button and assemble the product.
- 4. The process is now complete. The product has been reset to the factory default settings. If no DHCP server is available on the network, the default IP address is 192.168.0.90.
- 5. Using the installation and management software tools, assign an IP address, set the password and access the video stream.

It is also possible to reset parameters to factory default via the web interface. Go to **Setup > System Options > Maintenance**.

## Further Information

The User Manual is available at [www.axis.com](http://www.axis.com)

Visit [www.axis.com/techsup](http://www.axis.com/techsup) to check if there is updated firmware available for your network product. To see the currently installed firmware version, go to **Setup > About**.

Visit Axis learning center [www.axis.com/academy](http://www.axis.com/academy) for useful trainings, webinars, tutorials and guides.

## Warranty Information

For information about Axis' product warranty and thereto related information, see [www.axis.com/warranty/](http://www.axis.com/warranty/)

Installation Guide  
AXIS Q604 Series  
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