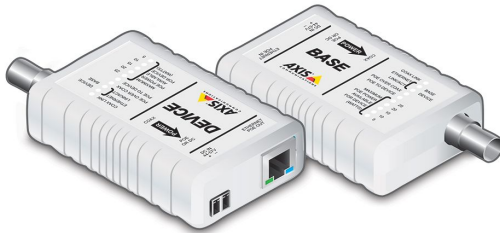# AXIS T8640 Ethernet over Coax Adaptor PoE+
Upgrade to IP but keep the coax.

> No need for re-cabling, keep the coax

> Carries PoE and PoE+ over the coax cable

> Ease of installation

> Reliable configuration

> Supports Axis network video products

AXIS T8640 enables camera installers to keep the legacy coax cabling when converting an analog system to digital. It delivers standard PoE and centrally-sourced power with no new cables required.

AXIS T8640 is an ideal choice for installation of network cameras where coax cables are already present and may be very long or inaccessible. For ease of installation and guaranteed performance, AXIS T8640 features an intuitive LED display, which gives confirmation of network and power status via the cable, with no need to access remote equipment to check connections.

AXIS T8640 can be used in those installations that require Power over Ethernet transmission over 100 m (328 ft). A full-rate network connection is delivered over maximum cable ranges that far exceed most

recommended distances for analog video installation, so conversion of all legacy coaxial cable types is predictable and reliable.

AXIS T8640 comprises AXIS T8641 Ethernet over Coax Base Unit PoE+ and AXIS T8642 Ethernet over Coax Device Unit PoE+. The base unit receives PoE power and transmits it down the coax. The device unit receives power from the coax and delivers up to full PoE+ power to the network camera. An optional power supply can be used if PoE is not available, or if higher power for the network camera is needed.

Configuration examples
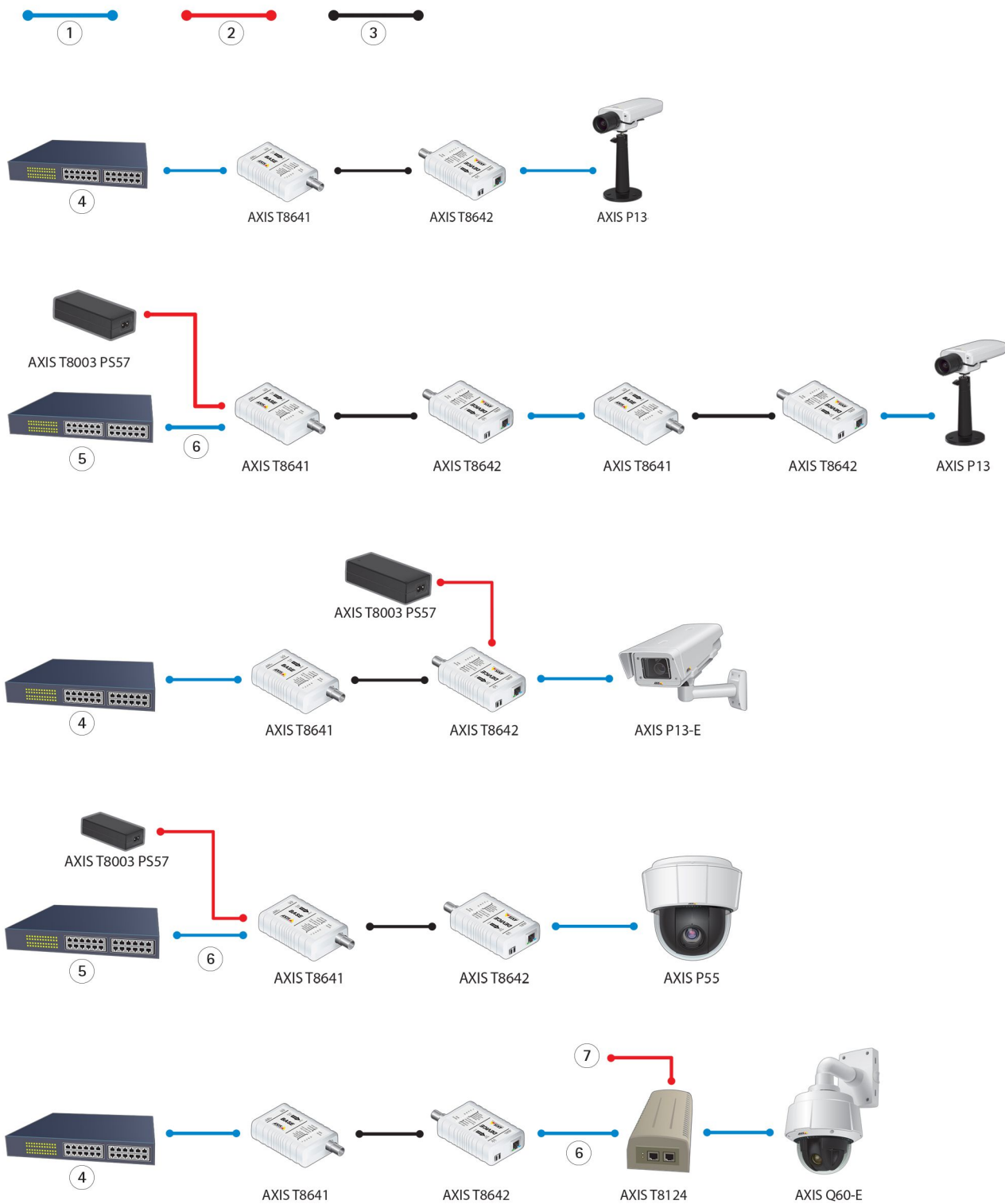
[1] Power and Data over Ethernet, [2] Power, [3] Power and Data over Coax, [4] PoE Switch, [5] Ethernet Switch, [6] Data only, [7] AC Power

Optional accessories

1. *AXIS T8640 Wall Mount Bracket*
2. *AXIS T8003 PS57*
3. *AXIS T8640 DIN Rail Clip*
4. *AXIS T8640 Rack Mount Bracket*
5. *AXIS T98A-VE Surveillance Cabinet Series*

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Range table

CC = Copper-Cored Cable (most common for correctly installed analog video)
CCS = 22AWG Copper-Coated Steel (shows worst-case performance if cable type is not known)

Camera model	Range	
	Using an IEEE 802.3af PoE switch	Using AXIS T8003 PS57
Low power PoE cameras *Network cameras that are PoE IEEE 802.3af Class 1 or 2 (< 6 W), for example:* AXIS M11 Network Cameras Series AXIS M30, AXIS M31-R, AXIS M31-VE, AXIS M32 Network Camera Series AXIS P33 Network Cameras (Indoor models) AXIS 212 PTZ/-V Network Camera	150 m (492 ft) of CCS RG-59 350 m (1148 ft) of CC RG-59 400 m (1312 ft) of CC RG-6 500 m (1640 ft) of CC RG-11	280 m (919 ft) of CCS RG-59 350 m (1148 ft) of CC RG-59 400 m (1312 ft) of CC RG-6 500 m (1640 ft) of CC RG-11
Medium power PoE cameras *Network cameras that are PoE IEEE 802.3af Class 1, 2 or 3 (< 10 W), for example:* AXIS M1054 Network Camera AXIS P13 Network Cameras (Indoor models) AXIS Q16 Network Cameras (Indoor models) AXIS Q1755 Network Camera AXIS Q19 Network Camera Series AXIS P33 Network Cameras (Outdoor models)	CCS RG-59 not supported 350 m (1148 ft) of CC RG-59 400 m (1312 ft) of CC RG-6 500 m (1640 ft) of CC RG-11	200 m (656 ft) of CCS RG-59 350 m (1148 ft) of CC RG-59 400 m (1312 ft) of CC RG-6 500 m (1640 ft) of CC RG-11
Full power PoE or PoE+ cameras *Network cameras that are PoE IEEE 802.3af Class 3 (> 10 W) or IEEE 802.3at, for example:* AXIS P13-E Network Cameras AXIS Q16-E Network Cameras AXIS Q1755-E Network Camera AXIS P55 Network Camera Series AXIS Q60 Network Cameras (Indoor models)	Not supported	80 m (262 ft) of CCS RG-59 350 m (1148 ft) of CC RG-59 400 m (1312 ft) of CC RG-6 500 m (1640 ft) of CC RG-11
Custom High PoE cameras *Network cameras that use AXIS T8124 High PoE 60 W Midspan 1-port, for example:* AXIS Q60-E Network Cameras	PoE to the camera is not supported. The AXIS T8642 Device can be powered over the coaxial cable, but an Axis High PoE midspan 60 W must be used to power the camera locally.	

Note: The actual range depends on several factors such as cable quality, cable thickness, connectors and camera power consumption. Range figures assume short (< 5 m or 16 ft) Cat-5e cables between equipment.

Technical Specifications - AXIS T8640 Ethernet over Coax

Models	AXIS T8641 Ethernet over Coax Base Unit PoE+ AXIS T8642 Ethernet over Coax Device Unit PoE+

Data & power

Data rate	Coaxial cable: 100+100 Mbps symmetrical to full range Ethernet cable: 100Base-TX Full Duplex
Connectors	Coaxial: BNC 75 Ohm Ethernet: Shielded RJ45, EIA 568A and 568B
Network cables	Coaxial: Any 75 Ohm coaxial (other impedances supported), to 500 m /1600 ft at full rate, see table Ethernet: patch or crossover, auto-detected shielded category 5 (or higher)
Max. output power	**AXIS T8641**: PoE over Coax with safe auto-detection and auto-cutout **AXIS T8642**: PoE (IEEE 802.3af/at) enabled to detected devices up to 25.5 W
Input power	**AXIS T8641**: PoE (IEEE 802.3at Class 4 powered device) or DC power supply **AXIS T8642**: PoE over Coax or DC power supply DC Power supply: AXIS T8003 PS57 or 44–57 V DC Class 2 isolated supply (max. 0.7 amps) Device power: 1.5 W
Installation and management	Plug-and-play installation; automatically detects PoE and High PoE-enabled devices and supplies in-line power Local LED management display

General

Display and indicators	LED indicators are located on the top panel and RJ45 connector Network indicators: Coax link, Ethernet link/activity x2 Power indicators: PoE over Coax, PoE to camera, maximum PoE power available for camera
Compliance	IEEE 802.3af, IEEE 802.3at, RoHS, WEEE, CE
Mounting	Wall, rack or Din Rail
Environment	Indoor
Operating conditions	–10 °C to 50 °C (14 °F to 122 °F) Humidity max. 95% RH (non-condensing)
Storage conditions	–40 °C to 74 °C (-40 °F to 165 °F)
Approvals	EN 55022 Class B, EN 55022 Class A, EN 55024, FCC Part 15 Subpart B Class B with FTP cabling
Dimensions	104 x 54 x 24 mm (4.1 x 2.2 x 0.9 in)
Weight	140 g (0.3 lb)

More information is available at www.axis.com

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