VICON

V-POC Series
PoE-over-Coax Replacement Kits

NDAA   GSA   TAA

Each base model (shown here) is shipped with one, four or eight camera modules

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Overview

Vicon's encoder replacement kits allow you to replace existing analog cameras with the latest in high-resolution IP technology. They offer reliable power delivery and long-range extension, even over low-grade coaxial cables, to allow a cost-effective upgrade to IP cameras.

Simple installation

With no need to configure IP addresses, set DIP switches, or pair units, installing these Encoder Replacement Kits is straightforward. As soon as power is applied, the IP cameras will power up and their IP addresses will become available on the network. The zero configuration HIGHWIRE units are completely network transparent.

How it works

The single, 4- or 8-channel Encoder Replacement Kits replace legacy analog encoders, and the coax cables are connected to separate single-channel camera module adaptors as shown in the diagram below. You can then replace low-resolution, locally powered analog cameras with high-resolution PoE powered IP cameras. A Gigabit Ethernet uplink connection on the kits ensures there is no network bandwidth limit on available image quality and resolution.

Product at a Glance

▸ Re-use existing coax that is already in place for analog cameras

▸ Replace typical single, 4-channel or 8-channel video encoders with a full IP system

▸ Reliably power new IP cameras with PoE over coax

▸ Fully automatic installation - no set-up of Ethernet-over-Coax (EOC) adaptor required

▸ Simple fast, cost-effective installation; less time on site

▸ Only 1 main switch port required per 8 channels
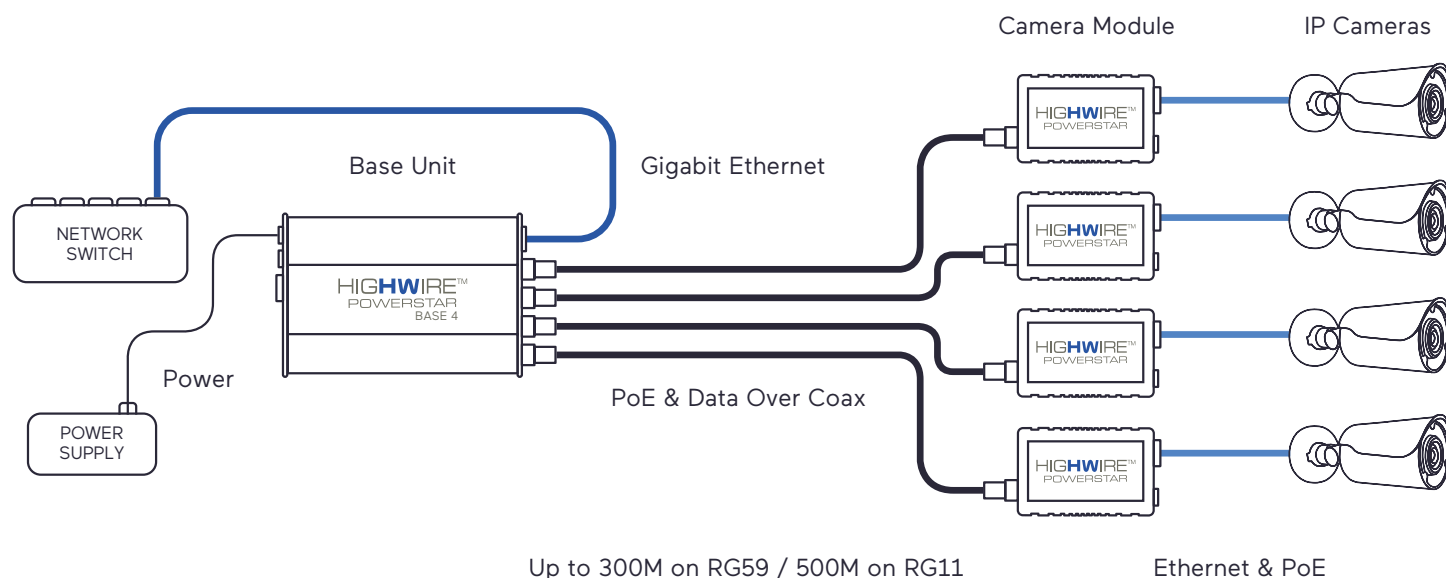
▸ PoE or PoE+ per channel, on all channels

Specifications

Model	V-POC-1KIT	V-POC-4KIT	V-POC-8KIT	Camera Modules
Device Interface				
Connector Type:	BNC 75 Ohm x 1	BNC 75 Ohm x 4	BNC 75 Ohm x 8	HW CAMERA: BNC 75 Ohm x 1
Cable Type:	Any 75 Ohm coaxial (other impedances supported)			
Range:	Up to 1000 ft (300 m) on RG59 or 1640 ft (500 m) on RG11 at full rate			
Bandwidth:	200 Mbps (total up + down) x 8			
Status Indicators:	HIGHWIRE coax link, Ethernet link/activity (BASE), PoE-over-coax, Power available (5/10/15/20/25W) Green/Red/Off			HIGHWIRE coax link, Ethernet link/activity (BASE), Ethernet link/activity (CAMERA), PoE-over-coax, PoE to camera, Power available (5/10/15/20/25W). Green/Red/Off
Ethernet Interface				
Connector Type:	RJ-45; V-POC-8KIT includes optional SFP socket for fiber			
Cable Type:	Cat5/6 patch or crossover, auto-detected or as per optional SFP device			
Rate:	100Base-TX, Full duplex (1000Base-T) with auto-negotiation	Gigabit Ethernet	Gigabit Ethernet, Full duplex (1000Base-T) with auto-negotiation	100Base-TX
Power				
Power Input:	57 VDC, up to 0.7 A via a 2-pin detachable screw terminal (supplied)	57 VDC, 1500 mA PSU (supplied) via 2-pin detachable screw terminal	57 VDC, up to 6 A via a 2-pin detachable screw terminal (supplied) or a 2-pin Micro-Fit power connector	PoE over coax from Base unit
Unit Power Consumption:	1.5 W	4.5 W	10 W; 20 W under full PoE load	1.5 W (each)
PoE Output:	IEEE 802.3af (PoE) or IEEE 802.3at (PoE+) up to 25 W per channel			
Physical/Environmental				
Dimensions:	H: 0.9 in. (24 mm); W: 2.1 in. (54 mm); L: 4.1 in. (104 mm) (including BNC connectors)	H: 0.87 in. (22 mm); W: 4.3 in. (110 mm); L: 6.8 in. (173 mm) (including BNC connectors)	H: 1.6 in. (40 mm); W: 4.3 in. (110 mm); L: 6.8 in. (173 mm) (including BNC connectors)	H: 0.94 in. (24 mm); W: 2.1 in. (54 mm); L: 4.1 in. (104 mm) (including BNC connectors)
Weight:	3.2 oz (90 g)	12.6 oz (356 g)	20.2 oz (572 g)	3.2 oz (90 g)
Operating Temperature:	14°F to 122°F (-10°C to 50°C)	32°F to 104°F (0°C to 40°C)		14°F to 122°F (-10°C to 50°C)
Humidity:	85% non-condensing			
Compliance:	FCC, CE, RoHS, REACH			
Warranty:	3 years			
Country of Origin:	Taiwan			

Specifications

Model	V-POC-1KIT	V-POC-4KIT	V-POC-8KIT	Camera Modules
Power Supply (included with kit)				
Power Input/Output:	Input: 100-240 VAC, 50/50 Hz, 1.0 A Output: 57 VDC, 0.8A	Input: 100-240 VAC, 50/50 Hz, 1.5 A Output: 57 VDC, 1.75 A	Input: 100-240 VAC, 50/50 Hz, 3.3 A Output: 56 VDC, 4.48 A	NA
Protection:	Input: Fused Output: Overvoltage/overcurrent with auto-reset; short circuit with auto-reset once short removed			NA
Dimensions:	H: 1.2 in. (30.5 mm); W: 1.9 in. (50 mm); L: 4.5 in. (114.5 mm)	H: 1.4 in. (35.5 mm); W: 2.5 in. (65 mm); L: 5.9 in. (150 mm)	H: 1.7 in. (43.5 mm); W: 3.7 in. (94 mm); L: 8.0 in. (204 mm)	NA
Weight:	6.7 oz (191 g)	10.6 oz (300 g)	36.0 oz (1020 g)	NA

Ethernet and Power Over Coax
Installation Diagram Table

Camera Module   IP Cameras

Base Unit   Gigabit Ethernet

NETWORK SWITCH

HIGHWIRE™ POWERSTAR BASE 4

Power

POWER SUPPLY

PoE & Data Over Coax

Up to 300M on RG59 / 500M on RG11   Ethernet & PoE

— **Ethernet Data Only**   — **Ethernet PoE**

PoE-Over-Coax Range Table

Power Source	PoE or PoE+ Switch					Power Supply				
Camera Power (Watts)	5 W	10 W	15 W	20 W	25 W	5 W	10 W	15 W	20 W	25 W
RG-59 (22 AWG core) Copper Core	1000 ft (300 m)	1000 ft (300 m)	880 ft (265 m)	650 ft (195 m)	NA	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)
RG-59 (20 AWG core) Copper Core	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)	NA	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)	1000 ft (300 m)
RG-11 (14 AWG core) Copper Corel	1600 ft (500 m)	1600 ft (500 m)	1600 ft (500 m)	1600 ft (500 m)	NA	1600 ft (500 m)	1600 ft (500 m)	1600 ft (500 m)	1600 ft (500 m)	1600 ft (500 m)
RG-59 (22 AWG CCS) Copper Coated Steel	150 ft (225 m)	420 ft (125 m)	330 ft (100 m)	200 ft (60 m)	NA	900 ft (270 m)	880 ft (265 m)	620 ft (185 m)	460 ft (140 m)	360 ft (110 m)

Ordering Information

Model Number	Description
V-POC-1KIT	ENCODER REPLACEMENT KIT, POE OVER COAX; single channel; includes Highwire Powerstar Base 1 plus (1) Highwire Powerstar Camera modules; includes 40 W PSU
V-POC-4KIT	ENCODER REPLACEMENT KIT, POE OVER COAX; 4 channels; includes Highwire Powerstar Base 4 plus (4) Highwire Powerstar Camera modules; includes 100 W PSU
V-POC-8KIT	ENCODER REPLACEMENT KIT, POE OVER COAX; 8 channels; includes Highwire Powerstar Base 8 plus (8) Highwire Powerstar Camera modules; includes 240 W PSU
V-POC-RM4	1U RACK-MOUNT ASSEMBLY; for Base 4 or Base 8 units (4 devices)
V-POC-RMP	1U RACK-MOUNT ASSEMBLY; for power supply unit (4 devices)