Model NV-EC1701

Ethernet over Coax EoC Transceiver

Technical Specifications

RJ45 ETHERNET INTERFACE

Connectivity

RJ45, auto-crossover

Wire type

4-pair Cat5 or better

Distance

up to 328ft (100m)

Speed

10/100 Base T, half/full duplex, auto-negotiation

Data throughput

 $80 Mbps \pm 10\%$ useable bandwidth per network Example: Four megapixel cameras, all sharing one coax network, each sending 20 Mbps video stream(s)

Power output

This Power Sourcing Equipment (PSE) supports Powered Devices (PDs) that are compatible with IEEE 802.3at or 802.3af, or PDs that draw up to 45 watts*. Switched 48VDC outputs appear on pins 4&5 and 7&8, and are current-protected and transient-protected

COAX BUILDING INTERFACE

Connectivity

BNC, RG-59/U or similar. One control room EoC transceiver plus up to four remote EoC transceivers are supported

Impedance

50 to 100Ω

Distance

Up to 2,500ft (750m)*

Transmission Technology

OFDM, 128 bit AES Encryption

*See maximum cable distance chart.

REGULATORY





4005 Bohannon Drive Menlo Park CA 94025

+1.650.462.8100 www.nvt.com www.nvt.com/email

Available Models:

- NV-EC1701 No Power Supply
- NV-EC1701-KIT1 One Camera Kit†
- NV-EC1701-KIT2 Two Camera Kit†
- NV-EC1701-KIT3 Three Camera Kit†
- NV-EC1701-KIT4 Four Camera Kit†

Accessories:

- NV-PS48-60W
 48VDC 60 watt power supply
- NV-BNC T BNC "T" adaptor
- NV-RM8/10
 Rack mounting kit, 19" x 2U holds up to 4 NV-EC1701 transceivers
- NV-RMEC16

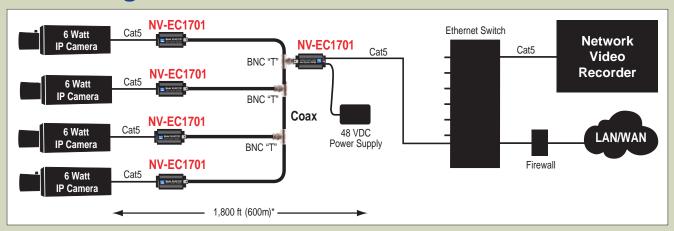
EoC Rack Mounting Tray Kit - up to (4) EoC Transceivers with Power Supplies (not included)

†Including one power supply and NV-BNCT adaptor(s) on KIT2, 3 and 4.

441-1701-1-B



Introducing the NVT Ethernet over Coax EoC Transceiver



Application Featuring NV-EC1701-KIT4 Four Camera Kit



Features

- Transmit Spec 10/100 Base T Full Duplex Ethernet up to 2,500ft (750m)* over RG-59 (or similar) powers PoE cameras (or other PoE devices), up to 45 watts
- 48VDC from one power supply is distributed over the coax to remote transceiver and camera (see power distance chart)*
- Transparent network connectivity; supports protocols (UDP, TCP/IP, HTTP, etc.), no addressing needed
- Advanced transmission and power technology with built-in transient protection
- Industry standard 128-bit AES Encryption
- Limited Lifetime Warranty

* Distance and number of devices supported will often be lower due to
power delivery voltage-drop on the cable. See Cable Distance Chart.

MAXIMUM CABLE DISTANCE CHART				
Camera Power	Maximum Wire Resistance	RG59/U 20 AWG	RG6 18 AWG	RG11 14 AWG
(Watts)	(Ohms)	12.7 Ω / 1,000ft 4.2 Ω / 100m	9.1 Ω / 1,000ft 3.0 Ω / 100m	3.7 Ω / 1,000ft 1.2 Ω / 100m
4.5 W	26.7Ω	2,101ft (640m)	2,500ft (750m)	2,500ft (750m)
6 W	22.6 Ω	1,800ft (547m)	2,500ft (750m)	2,500ft (750m)
10 W	16.0 Ω	1,256ft (383m)	1,753ft (534m)	2,500ft (750m)
15 W	11.7 Ω	918ft (280m)	1,281ft (391m)	2,500ft (750m
20 W	9.2 Ω	723ft (220m)	1,009ft (308m)	2,500ft (750m)
30 W	6.4 Ω	507ft (155m)	707ft (216m)	1,740ft (530m)
45 W	4.4 Ω	350ft (107m)	488ft (149m)	1,201ft (366m)

*IMPORTANT NOTE:

Distance will often be shorter due to power delivery voltage-drop on the wire. Maximum distances below are end-to-end, including any UTP. Power supplies may be used simultaneously at more than one EoC Transceiver.



NV-EC1701 Benefits

- Uses legacy coax to reduce cost of IP deployment and need for recabling
- Supports IP, and Megapixel Cameras or any other 10/100 BaseT IP device
- Simple configuration
- One EoC transceiver at the network end can support up to 4 remote transceivers
- Up to 4 transceivers can be rack mounted on an NV-RM/810 Rack Panel or NV-RMEC16 Rack Mount Tray Kit connecting up to 16 cameras

