

NV-EC1701

ETHERNET over 2-Wire TRANSCEIVER, SINGLE CHANNEL (BNC INPUT) – Page 1

TECHNICAL SPECIFICATIONS

SECURITY SYSTEM

DIVISION 16 – ELECTRICAL

SECTION 16770 – CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM

PART 2 – PRODUCTS

2.1 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and utilized in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with technical support numbers from the manufacturer. The number shall provide technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.

2.2 Ethernet over Coax (EoC) Transceiver, Single Channel

- A. The Ethernet over Coax (EoC) Transceiver shall be capable of 10/100 Base T Full Duplex Ethernet up to 8,000ft (2,5km) over RG59/U or better coax.
- B. The EoC transceiver shall be able to power PoE IP cameras or other PoE PD devices, up to 50 watts.
- C. One EoC transceiver at the network end can support up to four remote EoC transceivers using one NV-EC4BNC, 1:4 BNC splitter adaptor.
- D. The EoC transceiver shall have built-in transient protection
- E. The EoC transceiver shall be equipped with female BNC for 75-ohm in/output connections.
- F. The EoC transceiver shall be powered by an external desk style power supply with automatic reset. The power supply shall have an IEC380-C14 power inlet and 6ft (1.8m) 5.5 barrel connector shall provide a Class 2 (SELV) 55 VDC regulated output. The power supply shall be with efficiency VI.
- G. The EoC transceiver shall have a power consumption of 3.0W @ 55 VDC.
- H. The EoC transceiver shall have the following environmental specifications:
 - Operating Temperature: -40°F to +104°F (-40°C to +40°C)
 - Storage Temperature: -40°F to +185°F (-40°C to +85°C)
 - Humidity: 20 to 85% non-condensing
- I. The EoC transceiver shall have a Blue "Power-On" LED.

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- J. The EoC transceiver shall have a Green "BNC Link" LED.
- K. The EoC transceiver shall have a Green "RJ45 Link" LED that flashes with link activity.
- L. The EoC transceiver shall meet or exceed the following design and performance specifications:

RJ45 ETHERNET INTERFACE

Connectivity shall be RJ45, auto-crossover; wire type shall be 4-pair Cat5 or better; distance shall be up to 328ft (100m); speed shall be 10/100 Base T, half/full duplex, auto-negotiation, auto MDI/MDIX cross-over

Latency shall be 3mS

Data throughput shall be 85Mbps plus or minus 10% useable bandwidth per network

This Power Sourcing Equipment (PSE) shall support Powered Devices (PDs) up to 50 watts*, compatible with IEEE 802.3at or 802.3af PDs.

The camera shall be connected to the EoC transceiver using a standard RJ45 patch cable (available from NVT as the NV-PC4PR)

BUILDING WIRING INTERFACE

Connectivity shall be BNC, RG-59/U or similar. One control room NV-EC1701 transceiver plus up to four remote NV-EC1701 transceivers shall be supported. Impedance shall be 25 to 100 Ohms. Transmission technology shall be IEEE 1901, 128bit AES encryption.

*Important Note: Distance may often be shorter due to power delivery voltage-drop on the wire. Maximum distances are end-to-end, including any UTP. System architecture shall support the simultaneous use of power supplies at more than one EoC Transceiver.

- M. The EoC transceiver shall have a weight of 5.1 oz (145g), a power supply weight of 10.6 oz, (300g), a power cord weight of 5.5 oz (160g), total weight of 21.2 oz (601 g).
- N. The EoC transceiver shall have dimensions of Length: 5.1 in (131mm) x Height 1.3 in (33mm) x Width 1.5 in (38mm).
- O. Up to four EoC transceivers shall be able to be rack mounted using NV-RM8/10 Rack Mount Adaptor (not included).
- P. The EoC transceiver shall be UL and cUL listed.
- Q. The EoC transceiver shall be CE compliant.
- R. The EoC transceiver shall be FCC compliant.

- S. The Ethernet over Coax EoC Transceiver, Single camera device shall be the NVT:
NV-EC1701 ~ Single EoC Transceiver (no power supply)

The accompanying power supply shall be the NVT:
NV-PS55-60W ~ 55VDC, 60 Watt Power Supply
NV-PS55-110W ~ 55VDC, 110 Watt Power Supply

Accessories available:

NV-BNC-T, BNC “T” Adaptor
NV-EC4BNC, 1:4 BNC splitter adaptor
NV-PC4PR 4pair UTP/RJ45 Patch Cord, 4-pair, 3’ (1 m) Grey
NV-RMEC16-90, Rack Mounting Kit for 55VDC, 60W 110W Watt Power Supplies

EoC Transceiver Systems shall be available in 60 Watt Kit Form:

Single camera kit shall be the NVT:
NV-EC1701-KIT1, or equivalent and shall include two NV-EC1701,
(1) NV-PS55-60W, (2) NV-PC4PR.

Two camera kit shall be the NVT:
NV-EC1701-KIT2, or equivalent and shall include three NV-EC1701,
(1) NV-PS55-60W, (3) NV-PC4PR and (1) BNC T

Three camera kit shall be the NVT:
NV-EC1701-KIT3, or equivalent and shall include four NV-EC1701,
(1) NV-PS55-60W, (4) NV-PC4PR and (1) NV-EC4BNC

Four camera kit shall be the NVT:
NV-EC1701-KIT4, or equivalent and shall include five NV-EC1701,
(1) NV-PS55-60W, (5) NV-PC4PR and (1) NV-EC4BNC

EoC Transceiver Systems also available in 110 Watt Kit Form, please contact NVT
Phybridge for details.