



Model NV-216A-PV Video Transceiver



Features:

- ▶ **Power-Video (PV) signals are routed via UTP and RJ45**
- ▶ **Use with the RJ45 connector based NV-704J-PVD or the NV-716J-PVD for organized cable management to your control equipment from the IDF**
- ▶ **Up to 3,000ft (1km) with an NVT active receiver or hub**
- ▶ **Supports “up-the-coax” type control signal up to 750ft (225m)**
- ▶ **Exceptional interference rejection**
- ▶ **Built-in transient protection**
- ▶ **Limited lifetime warranty**

The NVT Model NV-216A-PV Video Transceiver with Power is a passive (non-amplified) device that allows the transmission of real-time monochrome or color video over Unshielded Twisted-Pair (UTP) telephone wire. Baseband (composite) signals of any type are supported.

The NVT Model NV-216A-PV video transceiver allows transmission of CCTV video and low voltage power over UTP cable. The NV-216A-PV incorporates the transceiver engine of NVT's popular NV-213A video transceiver with the added value of camera power connections. Power and Video are routed via UTP and RJ45 connections. Used at the camera, the passive NV-216A-PV has a compact body, a male BNC for direct connection to the camera, and is compatible with NVT's PVD™ product line. Connect the RJ45 to 4-pair cable to be routed to the NVT cable integrator and on to an active or passive receiver hub in the MDF/Control Room.

The unparalleled interference rejection and low emissions of the NV-216A-PV allows video signals to co-exist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable plant. As with all NVT products, the NV-216A-PV carries a limited lifetime warranty and is UL and cUL listed and CE, WEEE and RoHS compliant.

Network Video Technologies

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Technical Specifications

Video

Frequency response	DC to 5 MHz
Attenuation	0.5 dB typ
Common-mode / Differential-mode rejection 50 KHz to 5 MHz	60 dB typ
Impedance	
Coax, male BNC	75 ohms
UTP, RJ45 Data Connector	100 ohms

RJ45 pinouts



- 1+ Video
- 2+ Power
- 3+ Power
- 4+ Power
- 5+ Power
- 6+ Power
- 7+ Power
- 8+ Power

Wire Type

Network Wiring	One Unshielded Twisted Pair 24-16 AWG (0,5-1,31 mm)
Category Type	2 or better
Impedance	100 ± 20 ohms
DC Loop Resistance	52 ohms per 1,000 ft (18 ohms per 100 m)
Differential Capacitance	19 pF/ft max (62 pF/m max)

Mechanical

Body Length	1.6 inches (40.6mm)
Body Depth	0.88 inches (22mm)
Body Height (not including BNC)	.81 inches (20.5mm)
Weight	1.0 oz (30 g)

Environmental

Temperature	-20 to +75°C
Humidity (non-condensing)	0 to 95%
Transient Immunity	per ANSI / IEEE 587 C62.41

Regulatory



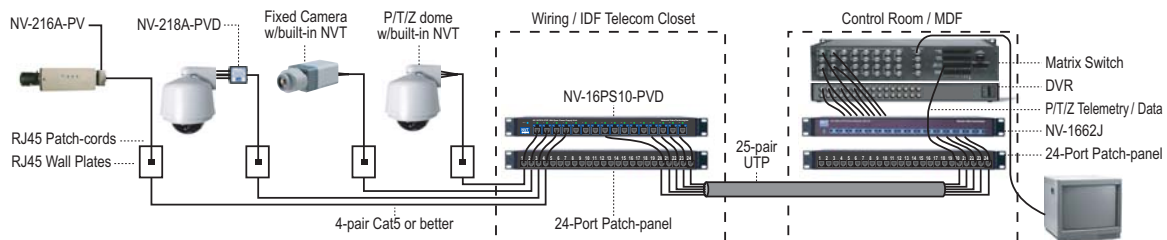
Wire Distance

Supply voltage, wire resistance and minimum camera operating voltage determine the maximum camera distance. Examples assume a minimum 21VAC at the camera:

Power Supply Voltage	24 VAC	28 VAC
100 mA B&W Camera		
2-pair 24 AWG	920 ft	2,150 ft
2-pair 23 AWG (Cat6)	1,160 ft	2,710 ft
300 mA Color Camera		
2-pair 24 AWG	300 ft	710 ft
2-pair 23 AWG (Cat6)	380 ft	900 ft
1 Amp P/T/Z Camera		
2-pair 24 AWG	90 ft	210 ft
2-pair 23 AWG (Cat6)	110 ft	270 ft

Wire should be Cat 5 or better. Low-voltage camera power, video, and RS-422 or RS-485 data may reside within the same wire bundle, however do not run 24 or 28VAC within the same wire bundle as other telecom or datacom signals.

Specifications subject to change without notice.



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