



## Model NV-216A-PV Video Transceiver



### Features:

- Power-Video (PV) signals are routed via UTP and RJ45
- Use with NVT's PVD™ Power Supply Hubs and Cable Integrators, or with a second NV-216A-PV
- Up to 750ft (225m) with a NVT Passive Hub or Transceiver
- Up to 1,500ft (460m) with a NVT StubEQ™ Hub
- Up to 3,000ft (1km) with a NVT DigitalEQ™ Hub or active receiver, (see Power Distance Chart)
- Frequency response DC to 10MHz (see Resolution Distance Chart)
- 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 NV-216A-PV incorporates the transceiver engine of NVT's popular NV-214A-M video transceiver with the added value of camera power connections. Used at the camera, the NV-216A-PV has a rugged compact body, a male BNC for direct connection to the camera, and is compatible with NVT's PVD™ product line. The NV-216A-PV can be used with an NVT cable integrator or power supply, an active or passive receiver hub or another NV-216A-PV.

The NV-216A-PV carries a limited lifetime warranty is UL and cUL listed and CE, WEEE and RoHS compliant.

### Network Video Technologies

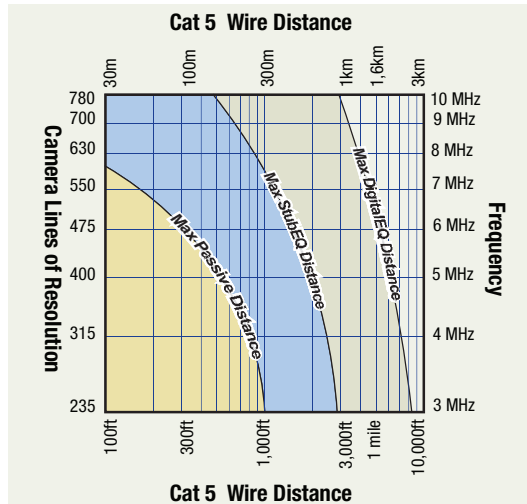
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### VIDEO DISTANCE RECOMMENDATIONS



### POWER DISTANCE CHARTS

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

Fixed 24VAC Camera		NV-216A-PV	
Power Supply Voltage	24 VAC	28 VAC	
Minimum Voltage at Camera	21 VAC	21 VAC	
<b>B&amp;W Camera 100 mA, 2.4 W</b>			
2-pair 24 AWG	899ft (274m)	2,098ft (640m)	
2-pair 23 AWG	1,134ft (346m)	2,645ft (807m)	
<b>Color Camera 200 mA, 4.8 W</b>			
2-pair 24 AWG	450ft (137m)	1,049ft (320m)	
2-pair 23 AWG	567ft (173m)	1,323ft (403m)	
<b>Color Camera 300 mA, 7.2 W</b>			
2-pair 24 AWG	300ft (91m)	699ft (213m)	
2-pair 23 AWG	378ft (115m)	862ft (269m)	

Fixed 12VDC Camera		NV-216A-PV	
Power Supply Voltage	12 VDC		
Minimum Voltage at Camera	11.5 VDC		
<b>B&amp;W Camera 200 mA, 2.4 W</b>			
2-pair 24 AWG		75ft (23m)	
2-pair 23 AWG		94ft (29m)	
<b>Color Camera 400 mA, 4.8 W</b>			
2-pair 24 AWG		37ft (11m)	
2-pair 23 AWG		47ft (14m)	
<b>Color Camera 800 mA, 7.2 W</b>			
2-pair 24 AWG		25ft (8m)	
2-pair 23 AWG		31ft (10m)	

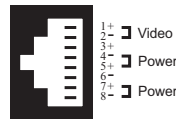
**Notes:** Low voltage camera power, video and RS-422 or RS-485 data may reside within the same wire bundle, however do not run 24 or 28VAC within the same wire bundle as other telecom or datacom signals.

### Technical Specifications

#### VIDEO

Frequency response	DC to 10 MHz
Attenuation	0.5 dB typ
Common-mode / Differential-mode rejection	60 dB typ
50 KHz to 10 MHz	
Impedance	
Coax, male BNC	75 ohms
UTP, RJ45 data connector	100 ohms

#### RJ45 PINOUTS



#### WIRE TYPE

Network Wiring	One unshielded twisted pair
	22-24 AWG (0.5-0.64mm)
	2 or better
Category type	
Impedance	100 ± 20 ohms
DC loop resistance	52 ohms per 1,000ft (18 ohms per 100m)
Differential capacitance	19 pF/ft max (62 pF/m max)

#### ENVIRONMENTAL

Temperature	-22 to +167 °F (-30 to +75°C)
Humidity (non-condensing)	0 to 95%
Transient immunity	per ANSI / IEEE 587 C62.41

#### MECHANICAL

Body Length	1.6in (40,6mm)
Body Depth	0.88in (22mm)
Body Height (not including BNC)	.81in (20,5mm)
Product Weight	1.0oz (30g)
Packaged Weight	2.0oz (57g)

#### REGULATORY



Specifications subject to change without notice.

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### Typical Applications

