

# Model NV-4PS13-PVD

# **Power Supply Passive Receiver Hub**







#### **Features:**

- Provides Class 2 SELV camera power while receiving video transmission and delivering P/T/Z telemetry all over a single 4-pair Cat5e cable
- Standard telecom/datacom structured cabling pinouts per EIA/TIA 568B
- Independently selectable 24VAC-OFF-28VAC with 1 Amp per channel
- Automatic-reset fault protection; transient protection
- · Individually floating outputs ensure total ground-loop immunity
- · Diagnostic LEDs show load/no load, miswires, and overload conditions
- Use with the NV-216A-PV, NV-218A-PVD or the NV-226J-PV transceiver at the camera
- Power cameras via UTP over significant distances (see Power Distance Chart)
- 1U high x 8" deep wall, desk or desk rack-mountable
- · Limited lifetime warranty

The 4-channel NV-4PS13-PVD is a key hybrid component that consolidates all CCTV system cabling using standard EIA/TIA 568B structured building wiring. Designed for installation in the IDF/Telecom Closet or MDF/Equipment Room, the Power Supply Passive Video Receiver Hub has independently selectable 24VAC-OFF-28VAC outputs that can support at-distance camera loads up to 1 Amp per channel. Use with NVT's PVD™ transceivers for cable runs under 750ft (225m). A built-in passive receiver hub allows connection to DVR or an encoder for IP transmission. Per-channel diagnostic LEDs display load /no-load, miswires, or fault conditions at a glance. Automatic-reset fault protection, transient protection, and ground loop free individually floating outputs.

### **Network Video Technologies**

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## **Technical Specifications**

### WIRE DISTANCE (Power Distance Charts)

Supply voltage, wire resistance and minimum camera operating voltage determine the maximum camera distance. Examples assume a minimum 21 VAC at the 24 VAC camera:

Fixed 24VAC Camera	NV-216A-PV		
Power Supply Voltage	24 VAC	28 VAC	
Minimum Voltage at Camera	21 VAC	21 VAC	
B&W Camera 100 mA, 2.4 W			
2-pair 24 AWG	899ft (274m)	2,098ft (640m)	
2-pair 23 AWG (Cat6)	1,134ft (346m)	2,645ft (807m)	
Color Camera 200 mA, 4.8 W			
2-pair 24 AWG	450ft (137m)	1,049ft (320m)	
2-pair 23 AWG (Cat6)	567ft (173m)	1,323ft (403m)	
Color Camera 300 mA, 7.2 W			
2-pair 24 AWG	300ft (91m)	699ft (213m)	
2-pair 23 AWG (Cat6)	378ft (115m)	862ft (269m)	

P/T/Z 24VAC Camera	NV-218A-PVD		
Power Supply Voltage	24 VAC	28 VAC	
Minimum Voltage at Camera	21 VAC	VAC 21 VAC	
P/T/Z Camera 1,000 mA, 24 W			
2-pair 24 AWG	90ft (27m)	210ft (64m)	
2-pair 23 AWG (Cat6)	113ft (35m)	265ft (81m)	

ixed 12VDC Camera NV-226J-		NV-226J-PV	
Power Supply Voltage	24 VAC	28 VAC	
Minimum Voltage at Camera	11.5 VDC	11.5 VDC	
B&W Camera 200 mA, 2.4 W			
2-pair 24 AWG	1,498ft (457m)	2,098ft (640m)	
2-pair 23 AWG (Cat6)	1,889ft (576m)	2,645ft (807m)	
Color Camera 400 mA, 4.8 W			
2-pair 24 AWG	874ft (267m)	1,174ft (358m)	
2-pair 23 AWG (Cat6)	1,102ft (336m)	1,480ft (452m)	

Notes: Wire should be Cat5 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.

#### VIDEO

11000			
Frequency response		DC to	5 MHz
Attenuation		0.5	dB typ
Common-mode / Differentia	al-mode rejection		
15 KHz to 5 MHz		60 dB	typ
Impedance			
Coax, female BNC		75	ohms
UTP, RJ45		100	ohms
Network Wiring	One four-pair Cat5 or b	etter per c	hannel

#### **CAMERA POWER**

Each camera is powered by a fully isolated (floating) Class 2 SELV output, individually switchable 24VAC / OFF/ 28VAC at up to 1 Amp. Each output is individually thermistor protected.

#### **POWER INPUT**

Power inlet IEC with molded power cord (included) On-off switch Rear panel Voltage 115 / 230 VAC Current 1.25 / 0.625 Amps Frequency 50 / 60 Hz Protection 2.5A slo-blo 8x20mm fuse and thermal shutdown 125 Watts Wattage Heat (power supply only) 50 BTU/hour (power supply with cameras) 420 BTU/hour

#### FRONT-PANEL LEDS

Blue LED System power on Per-channel LED indicates: Off No load connected Green Load connected and working Amber Mis-wiring detected Overload shutdown condition

#### ENVIRONMENTAL

**Ambient Temperature** -4 to 122 °F (-20 to +50 °C) Minimum airflow 4 ft<sup>3</sup>/min (0,1m<sup>3</sup>/min) Humidity (non-condensing) 0 to 95% Transient Immunity per ANSI 587 C62.41

#### **MECHANICAL**

Dimensions 9.25in wide, 1.75in high, 7.25in deep including connectors: (235mm wide, 44,5mm high, 184mm deep) 7lb (3,2kg) Weight Mounting Wall, or desk mount

### REGULATORY







Specifications subject to change without notice.

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#### CAMERA PVD CONNECTIONS

Four front-panel RJ45 outputs support up to four fixed or P/T/Z telemetry cameras over 4-pair UTP.

Channel 2

1 Video 2 +



Channel 4

1 Video 4 +

### **CONTROL ROOM DATA**

RS-422 or RS-485 type P/T/Z telemetry/ data signals are paralleled together in groups of four, and passed through the unit and delivered to the control room via a rear-panel RJ45 connector.



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

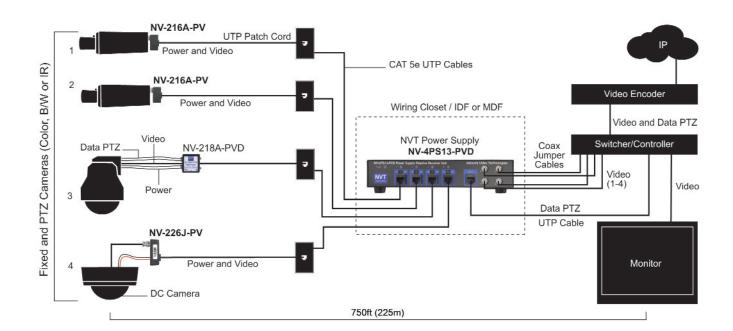
Channel 3

1 Video 3 +

### **Typical Application**

Channel 1

1 Video 1 +



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