

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-0FF-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.



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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 Camera 24VAC only, used with NV-216A-PV				
Power Supply Voltage	24 VAC	28 VAC		
Minimum Voltage at Camera	21 VAC	21 VAC		
B&W Camera, 2.4 W				
2-pair 24 AWG	789ft (240m)	1,840ft (561m)		
2-pair 23 AWG	994ft (303m)	2,320ft (707m)		
Color Camera, 4.8 W				
2-pair 24 AWG	393ft (120m)	916ft (279m)		
2-pair 23 AWG	495ft (151m)	1,155ft (352m)		
Color Camera, 7.2 W				
2-pair 24 AWG	262ft (80m)	612ft (186m)		
2-pair 23 AWG	331ft (101m)	771ft (235m)		

Fixed Dual Voltage 24VAC/12VDC Camera with NV-216A-PV			
Power Supply Voltage	24 VAC	28 VAC	
Minimum Voltage at Camera	14 VAC	14 VAC	
B&W Camera, 2.4 W			
2-pair 24 AWG	1,753ft (534m)	2,454ft (748m)	
2-pair 23 AWG	2,210ft (674m)	3,094ft (943m)	
Color Camera, 4.8 W			
2-pair 24 AWG	874ft (266m)	1,223ft (373m)	
2-pair 23 AWG	1,102ft (336m)	1,542ft (470m)	
Color Camera, 7.2 W			
2-pair 24 AWG	583ft (178m)	816ft (249m)	
2-pair 23 AWG	735ft (224m)	1,029ft (314m)	

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

Fixed 12VDC Camera used with NV-226J-PV				
Power Supply Voltage	24 VAC	28 VAC		
B&W Camera, 2.4 W				
2-pair 24 AWG	1,586ft (748m)	2,220ft (677m)		
2-pair 23 AWG	1,999ft (609m)	2,799ft (853m)		
Color Camera 4.8 W				
2-pair 24 AWG	795ft (242m)	1,113ft (339m)		
2-pair 23 AWG	1,002ft (306m)	1,403ft (428m)		

Notes: Actual distance will depend on the camera's inrush and operating current, minimum operating voltage, and the wire's environmental temperature. Please consult NVT Customer Support for further information.

Wire should be category rated Unshielded Twisted-Pair (UTP) cable, Low voltage camera power, video, and RS-422 or RS-485 telemetry may be sent within the same wire bundle. Do not run 24VAC or 28VAC in the same wire bundle with analog telecom signals. However you may share the same wire/cable tray.

An online wire Power Distance Calculator is available at www.nvt.com under Product Support.

VIDEO

DC to 10 MHz Frequency response Attenuation 0.5 dB typ Common-mode / Differential-mode rejection 15 KHz to 5 MHz 60 dB typ Impedance Coax, female BNC 75 ohms UTP, RJ45 100 ohms

CAMERA POWER

Network Wiring

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 Wattage 125 Watts Heat (power supply only) 50 BTU/hour

(power supply with cameras) 420 BTU/hour

One four-pair Cat5 or better per channel

FRONT-PANEL LEDS

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

ENVIRONMENTAL

Ambient Temperature -4 to 122 °F (-20 to +50 °C) Humidity (non-condensing) 0 to 95% Transient Immunity per ANSI 587 C62.41

MECHANICAL

9.25in wide, 1.75in high, 7.25in deep Dimensions including connectors: (235mm wide, 44,5mm high, 184mm deep) Mounting Wall, or desk mount **Product Weight** 7lb (3,2kg) Packaged Weight 8.42lb (3,8kg)

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.



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.



Typical Application

