



Model NV-16PS13-PVD Power Supply Passive Video Receiver Hub



Front



Rear



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 NV-226J-PV transceiver at the camera
- Power cameras via UTP over significant distances (See Power Distance Chart)
- 1U high; 12" deep; wall, desk, or rack-mountable, 2ft (60cm) BNC Cables included
- Limited lifetime warranty

The 16-channel NV-16PS13-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 21VAC at the 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 24VAC12VDC Camera with NV-216A-PV		
Power Supply Voltage	24 VAC	28 VAC
Minimum Voltage at Camera	14 VAC	14 VAC
B&W Camera 100 mA, 2.4 W		
2-pair 24 AWG	1,753ft (534m)	2,454ft (748m)
2-pair 23 AWG	2,210ft (674m)	3,000ft (915m)
Color Camera 200 mA, 4.8 W		
2-pair 24 AWG	874ft (266m)	1,223ft (373m)
2-pair 23 AWG	1,102ft (336m)	1,542ft (470m)
Color Camera 300 mA, 7.2 W		
2-pair 24 AWG	583ft (173m)	815ft (250m)
2-pair 23 AWG	735ft (224m)	1,025ft (310m)

P/T/Z 24VAC Camera	NV-218A-PVD	
Power Supply Voltage	24 VAC	28 VAC
Minimum Voltage at Camera	21 VAC	21 VAC
P/T/Z Camera 1,000 mA, 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 (482m)	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

Frequency response DC to 10 MHz
 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
 Network Wiring One four-pair Cat5 or better per channel

CAMERA POWER

Each camera is powered by a fully isolated (floating) Class 2 SELV output, individually switchable 24VAC / Off / 28 VAC at up to 1 Amp. Each output is individually thermistor protected for auto-reset after fault removal.

POWER

Power inlet IEC with molded power cord (included)
 Voltage 115 / 230V
 Current 4.3/ 2.2 Amps
 Protection 5x20mm type T fuse 5Amp 250V
 Wattage 500 Watts
 Heat (power supply only) 125 BTU / Hour
 (power supply with cameras) 1,200 BTU / Hour

FRONT PANEL LEDs

System Power: Blue LED
 Per-channel LED Indicates:
 Off No load connected
 Green Load connected and working
 Amber Mis-wiring detected
 Red Overload fault condition

ENVIRONMENTAL

Ambient Temperature -4 to +122 °F (-20 to +50 °C)
 Minimum airflow 4ft³/min (0,1m³/min)
 Humidity (non-condensing) 0 to 95%
 Transient Immunity per ANSI / 587 C62.41

MECHANICAL

Dimensions, including connectors
 19in wide, 1.73in high, 12in deep
 43cm wide, 4,5cm high, 20cm deep
 Weight 24.9lb (11,3kg)

ACCESSORIES (included)

Mounting Rack mount "L" brackets for front, rear, or wall installations; rubber feet for desk applications
 Cables Sixteen 2ft (60cm) coax jumpers
 Molded IEC power inlet cord 7ft (200cm)

OPTIONAL EQUIPMENT

Mounting NV-RMBK2 Rear Mount Support Kit (designed for use with thinner metal equipment racks)
 NV-WMBK2 Wall Mount Bracket Kit (heavy duty)

REGULATORY



Specifications subject to change without notice.

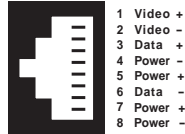


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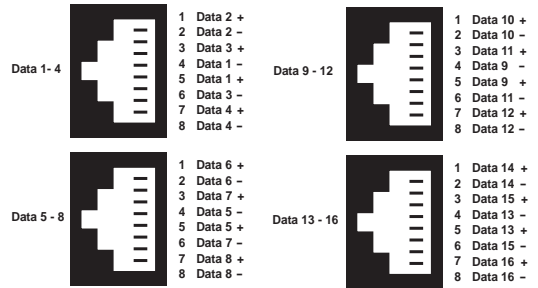
CAMERA PVD CONNECTIONS

Sixteen front-panel RJ45 outputs support up to sixteen fixed or P/T/Z telemetry cameras over 4-pair UTP Cat5 or better.



CONTROL ROOM DATA

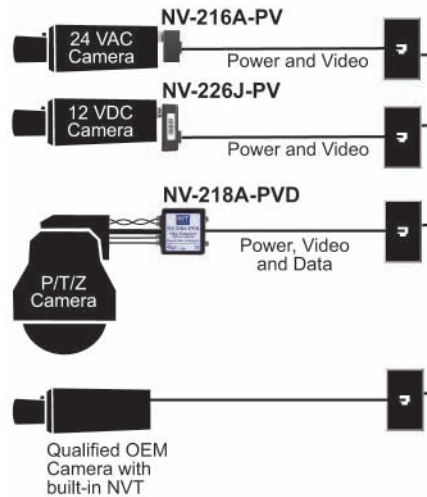
RS-422 or RS-485 type P/T/Z telemetry / data signals are passed through the unit and delivered to the control room via a rear-panel RJ45 connector.



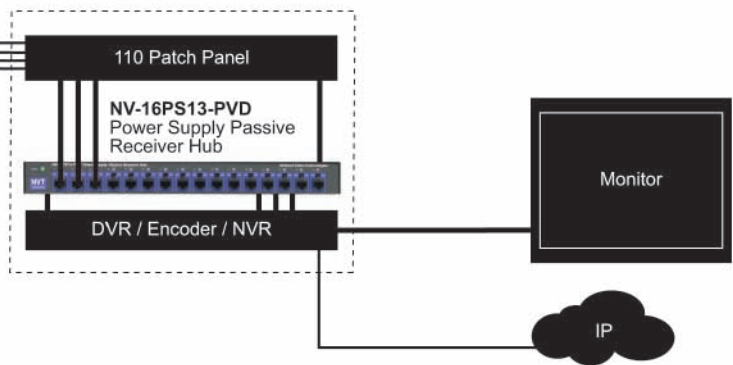
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Typical Application

Camera Location and Transmitter Connections



IDF / Telecoms Room or MDF / Control Room Receiver Connections



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