Model NV-16PS42-PVD

16-Channel Power Supply StubEQ™ Active Receiver Hub

Front

Rear

Features:

- Provides Class 2 SELV 28 VAC with up to 1 Amp/channel while receiving video transmission and delivering P/T/Z telemetry, all over a single 4-pair Cat5 cable for each camera
- Built-in distribution amplifier with 2 video outputs per channel
- Full motion CCTV video at distances up to 1,500ft (460m) when used with any passive NVT transceiver
- Adaptive StubEQ™ fully automatic 2-band equalization provides adjustment free equalization every time, no manual adjustments required
- Automatic-reset fault protection; transient protection
- Individually floating power outputs and differential video inputs ensure total ground-loop immunity
- Diagnostic LEDs show load/no load, miswires, overload conditions, and video status
- Limited lifetime warranty

The 16-channel NV-16PS42-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, Power Supply StubEQ™ Active Receiver Hubs have individual floating 28VAC outputs that support at-distance camera loads up to 1 Amp per channel for cable runs up to 1,500ft (460m). A built-in StubEQ™ video receiver hub ensures a zero loss video signal for connection into a DVR or IP encoder. Standard features include: automatic-reset fault protection, transient protection, ground loop free individually floating outputs and power and video diagnostics. All NVT products are UL and cUL listed, are compliant with CE, RoHS, WEEE, and come with NVT's lifetime warranty.

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Technical Specifications

RECOMMENDED WIRE DISTANCE

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 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

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 Category cable

CAMERA POWER

Each camera is powered by a fully isolated (floating) 28 VAC Class 2 SELV output at up to 1 Amp. Each output is individually thermistor protected for auto-reset.

POWER

Power inlet	IEC with molded power cord (included)
Voltage	115 / 230V
Current	3.0 / 1.5 Amps
Protection	5x20mm type T fuse 5 Amp 250V
Wattage	500 Watts
Heat	(NV-16PS42-PVD only) 275 BTU / Hour
	(NV-16PS42-PVD with cameras) 2,000 BTU / Hour

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, 30cm deep
Product Weight	23.5lb (10,66kg)
Packaged Weight	32lb (14,5kg)

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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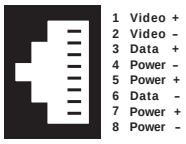
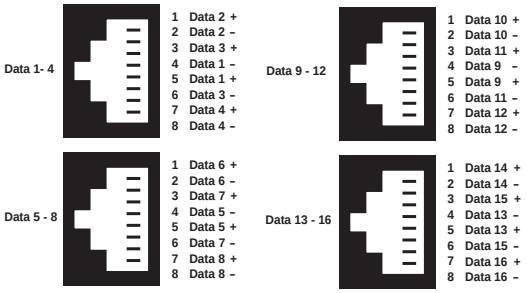
CAMERA PVD CONNECTIONS

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



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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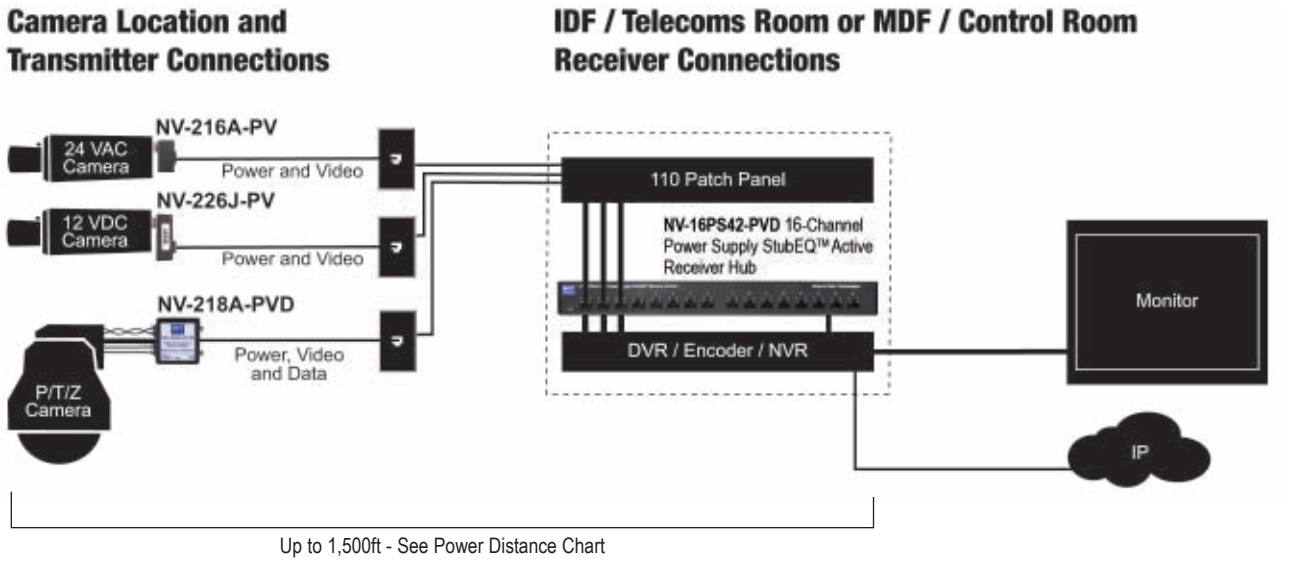
Typical Application



Up to 1,500ft - See Power Distance Chart

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