

Model NV-16PS10-PVD Power Supply Cable Integrator Hub



Features:

- Provides Class 2 SELV camera power and pass-through video and telemetry data connectivity for up to 16 cameras, each via a single RJ45 4-pair UTP cable
- · Standard telecom/datacom structured cabling pinouts per EIA/TIA 568B
- Independently selectable 24 or 28VAC with 1 Amp max 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 or NV-218A-PVD transceivers or the NV-226J-PV transmitter at the camera
- Power cameras via UTP over significant distances (see Power Distance Chart)
- 1 U high; 12" deep; wall, desk, or rack-mountable
- Limited lifetime warranty

The NVT model NV-16PS10-PVD combines a 1 Amp/channel*† power supply with pass through video and telemetry data, for up to 16 cameras, all over UTP wire. Designed for installation in the wiring/IDF telecom closet, or at the Control/MDF room, the NV-16PS10-PVD consolidates connectivity via standard 4-pair RJ45 EIA/TIA 568B compliant premises wiring and pinouts.

At the camera, Power, Video and Data connections are made using a PVD[™] transceiver via an RJ45 connector and a single 4-pair cable. Control/MDF room connections are achieved with a single 4-pair RJ45 cable for each group of four cameras. Consolidated P/T/Z telemetry data, if required, passes through the NV-16PS10-PVD's data path, and is connected to the controller via another 4-pair RJ45 cable.

*10 Amps, aggregate to comply with CB / IEC 60065

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Model NV-16PS10-PVD

Power Supply Cable Integrator Hub

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 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	21 VAC
P/T/Z Camera 1,000 mA, 2.4 W		
2-pair 24 AWG	90ft (27m)	210ft (64m)
2-pair 23 AWG (Cat6)	113ft (35m)	265ft (81m)

Fixed 12VDC Camera		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

Frequency response	DC to	5 MHz
Attenuation	0.5	dB typ
Common-mode / Differentia	I-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 c	hannel

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 (10 Amps aggregate). Each output is individually thermistor protected for auto=reset after fault removal.

POWER INPUT P

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Power inlet:	IEC with molded power cord (included)
On-Off Switch	Rear panel
Voltage	115 / 230 VAC
Current	3.0 / 1.5 Amps
Frequency	50 / 60 Hz
Protection	5A slo-blo 8 x 20mm fuse and thermal shutdown
Wattage	325 Watts
Heat	(power supply only) 125 BTU / hour
	(power supply with cameras) 1,200 BTU / hour

System power on No load connected

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
	Red	Overload shutdown condition

ENVIRONMENTAL

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

MECHANICAL

Dimensions inc	luding connectors: 19in wide, 1.73in high, 12in deep
	(483mm wide, 44mm high, 305mm deep
Weight	22lb (10kg)
Mounting	Wall, desk, or rack mount, brackets

ACCESSORIES (included)

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

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 VIDEO

UTP video signals are passed through the unit and delivered to the control / MDF room via rear-panel RJ45 connectors.



Typical Application

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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