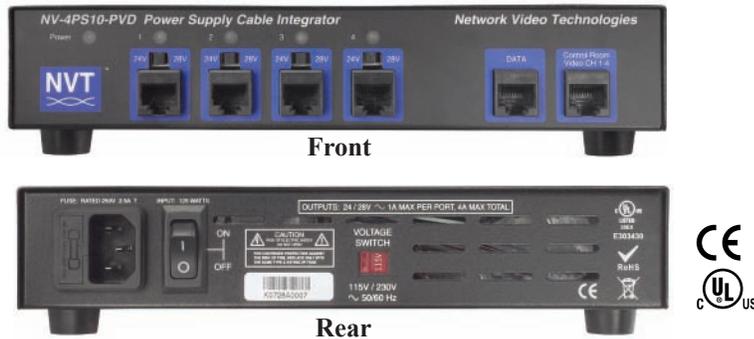




## Model NV-4PS10-PVD Power Supply Cable Integrator Hub



### Features:

- Provides Class 2 SELV camera power and pass-through video and telemetry data connectivity for up to 4 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
- Frequency response DC to 10MHz (see Recommended Distance Chart)
- 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)
- 1.75" high x 7.25" deep x 9.25" wide, wall or desk mount
- Limited lifetime warranty

The NVT Model NV-4PS10-PVD combines a 1 Amp/channel power supply with pass through video and telemetry data, for up to 4 cameras, all over UTP wire. Designed for installation in the wiring/IDF telecom closet, or at the Control/MDF room, the NV-4PS10-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. P/T/Z telemetry data, if required, passes through the NV-4PS10-PVD's data path and is connected to the controller via a second 4-pair RJ45 cable.

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4005 Bohannon Drive • Menlo Park, CA 94025 • USA  
(+1) 650.462.8100 • FAX (+1) 650.326.1940  
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# Model NV-4PS10-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 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>B&amp;W Camera 100 mA, 2.4 W</b>			
2-pair 24 AWG	899ft (274m)	2,098ft (640m)	
2-pair 23 AWG	1,134ft (346m)	2,645ft (807m)	
<b>Color Camera 200 mA, 4.8 W</b>			
2-pair 24 AWG	450ft (137m)	1,049ft (320m)	
2-pair 23 AWG	567ft (173m)	1,323ft (403m)	
<b>Color Camera 300 mA, 7.2 W</b>			
2-pair 24 AWG	300ft (91m)	699ft (213m)	
2-pair 23 AWG	378ft (115m)	862ft (269m)	

Fixed Dual Voltage 24VAC12VDC Camera with NV-216A-PV		NV-216A-PV	
Power Supply Voltage	24 VAC	28 VAC	
Minimum Voltage at Camera	14 VAC	14 VAC	
<b>B&amp;W Camera 100 mA, 2.4 W</b>			
2-pair 24 AWG	1,753ft (534m)	2,454ft (748m)	
2-pair 23 AWG	2,210ft (674m)	3,000ft (915m)	
<b>Color Camera 200 mA, 4.8 W</b>			
2-pair 24 AWG	874ft (266m)	1,223ft (373m)	
2-pair 23 AWG	1,102ft (336m)	1,542ft (470m)	
<b>Color Camera 300 mA, 7.2 W</b>			
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	
<b>P/T/Z Camera 1,000 mA, 21 W</b>			
2-pair 24 AWG	90ft (27m)	210ft (64m)	
2-pair 23 AWG	113ft (35m)	265ft (81m)	

Fixed 12VDC Camera used with NV-226J-PV		NV-226J-PV	
Power Supply Voltage	24 VAC	28 VAC	
<b>B&amp;W Camera, 2.4 W</b>			
2-pair 24 AWG	1,586ft (482m)	2,220ft (677m)	
2-pair 23 AWG	1,999ft (609m)	2,799ft (853m)	
<b>Color Camera 4.8 W</b>			
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](http://www.nvt.com) under Product Support.

#### 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
Wattage	125 Watts
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
Red	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)
Weight	7lb (3,2kg)
Mounting	Wall, or desk mount

#### REGULATORY



Specifications subject to change without notice.

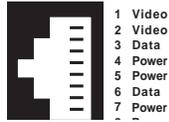


# Model NV-4PS10-PVD

## Power Supply Cable Integrator Hub

### CAMERA PVD CONNECTIONS

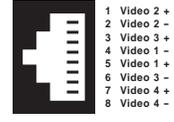
Four front-panel RJ45 outputs support up to four fixed or P/T/Z telemetry cameras over 4-pair UTP.



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

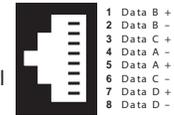
### CONTROL ROOM VIDEO

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

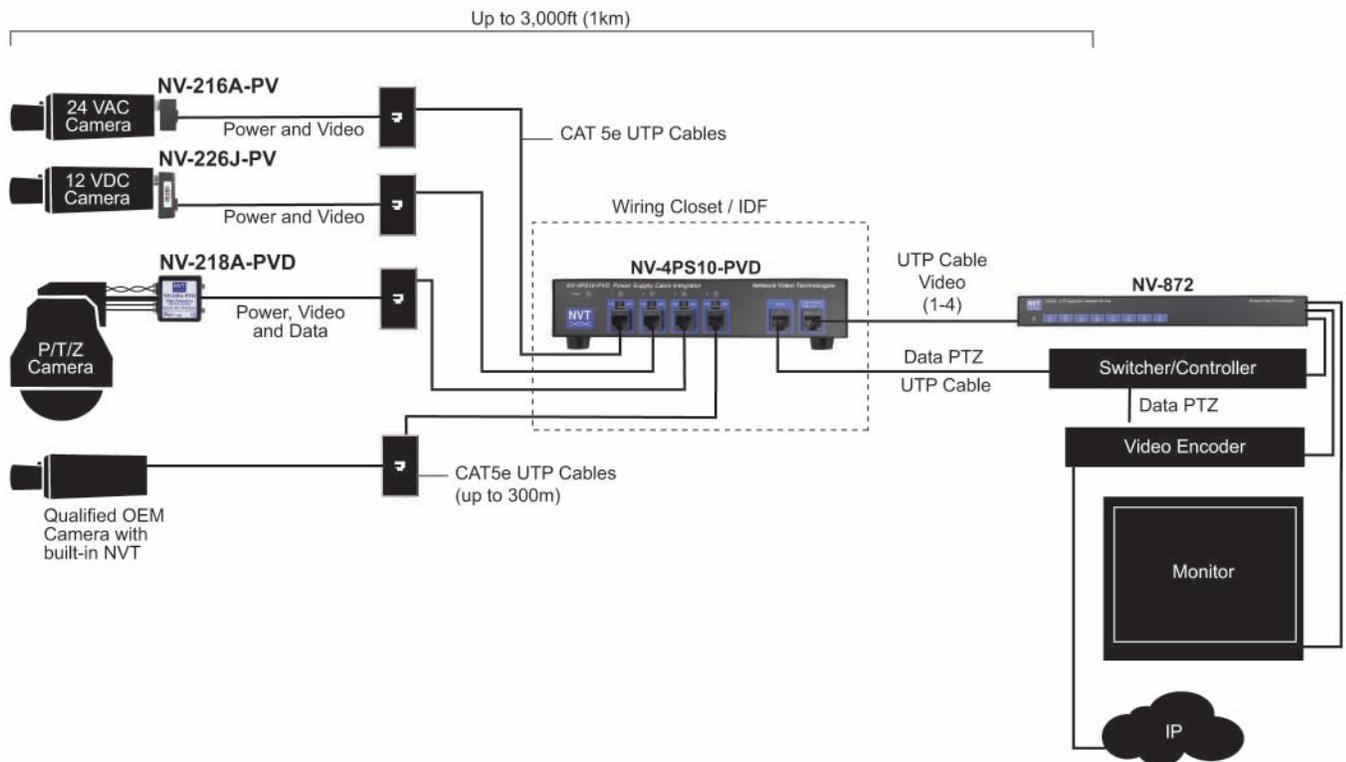


### CONTROL ROOM DATA

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



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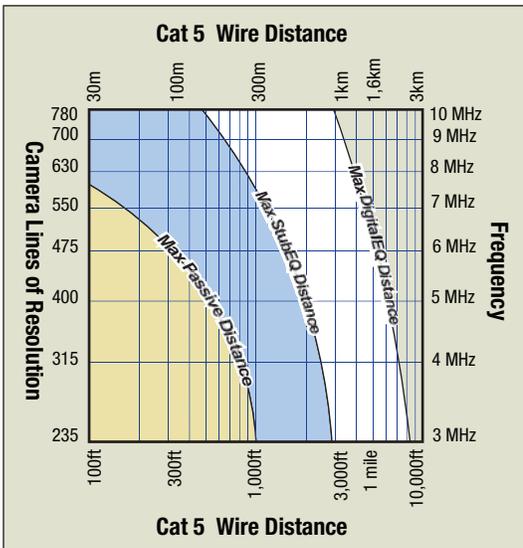
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# Model NV-4PS10-PVD

## Power Supply Cable Integrator Hub

### Distance Recommendations



### Good

#### Passive Transceivers & Hubs

- UTP transmission 0-750ft (225m)
- No power required
- Built in transient protection
- Lifetime warranty

### Best

#### DigitalEQ Hubs

- UTP Transmission 0-3,000 ft (1 Km)
- Fully automatic 4-band equalization
- Automatic polarity reversal
- 2 or 4 BNC outputs per channel (16- & 8-port models)
- Built-in "at-a-glance" diagnostics
- Built-in ground lifting
- Built-in transient protection
- 2 ft (60 cm) coax cables included
- Lifetime warranty

### Better

#### StubEQ Hubs

- UTP Transmission 0-1,500ft (460m)
- Fully automatic 2-band equalization
- Built-in ground lifting
- Built-in transient protection
- Compact rackmount design
- Lifetime warranty

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