



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



Front



Rear



### Features:

- ▶ Provides Class 2 SELV camera power and pass-through video & 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 28 VAC 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 the NV-218A-PVD transceiver at the camera
- ▶ Power cameras via UTP over significant distances (See power distance chart)
- ▶ 1U 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 the NV-216A-PV (power-video only) or the NV-218A-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 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

### Network Video Technologies

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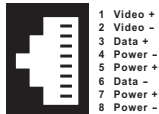


# Model NV-16PS10-PVD Power Supply Cable Integrator Hub

## Technical Specifications

### Camera Power-Video-Data Connections

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



### Power Output

Each camera is powered by a fully isolated (floating) Class 2 SELV output, individually switchable 24VAC / Off / 28VAC at up to 1 Amp, with an aggregate load of up to 10 Amps. Each output is individually thermistor protected for auto-reset after fault removal.

### Wire Distance

Supply voltage, wire resistance and minimum camera operating voltage determine the maximum camera distance. Examples assume a minimum 21VAC at the camera:

Power Supply Voltage	28 VAC	24 VAC
<b>100 mA B&amp;W Camera</b>		
2-pair 24 AWG	2,150 ft	920 ft
2-pair 23 AWG (Cat6)	2,710 ft	1,160 ft
<b>300 mA Color Camera</b>		
2-pair 24 AWG	710 ft	300 ft
2-pair 23 AWG (Cat6)	900 ft	380 ft
<b>1 Amp P/T/Z Camera</b>		
2-pair 24 AWG	210 ft	90 ft
2-pair 23 AWG (Cat6)	270 ft	110 ft

UTP wire should be Cat 5 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.

### Front-Panel LEDs

Blue LED System Power On

Per-channel LED indicates:

Off	No load connected
Green	Load connected & working
Amber	Mis-wiring detected
Red	Overload shutdown condition

### Camera Connections

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

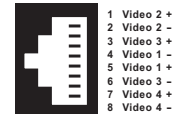
Channel 9	Channel 10	Channel 11	Channel 12	Channel 13	Channel 14	Channel 15	Channel 16
1 Video 9 +	1 Video 10 +	1 Video 11 +	1 Video 12 +	1 Video 13 +	1 Video 14 +	1 Video 15 +	1 Video 16 +
2 Video 9 -	2 Video 10 -	2 Video 11 -	2 Video 12 -	2 Video 13 -	2 Video 14 -	2 Video 15 -	2 Video 16 -
3 Data C +	3 Data C +	3 Data C +	3 Data C +	3 Data D +	3 Data D +	3 Data D +	3 Data D +
4 Power 9 -	4 Power 10 -	4 Power 11 -	4 Power 12 -	4 Power 13 -	4 Power 14 -	4 Power 15 -	4 Power 16 -
5 Power 9 +	5 Power 10 +	5 Power 11 +	5 Power 12 +	5 Power 13 +	5 Power 14 +	5 Power 15 +	5 Power 16 +
6 Data C -	6 Data C -	6 Data C -	6 Data C -	6 Data D -	6 Data D -	6 Data D -	6 Data D -
7 Power 9 +	7 Power 10 +	7 Power 11 +	7 Power 12 +	7 Power 13 +	7 Power 14 +	7 Power 15 +	7 Power 16 +
8 Power 9 -	8 Power 10 -	8 Power 11 -	8 Power 12 -	8 Power 13 -	8 Power 14 -	8 Power 15 -	8 Power 16 -

### Control Room Connections

Channels 1-4	Channels 5-8	Channels 9-12	Channels 13-16	Telemetry / Data
1 Video 2 +	1 Video 6 +	1 Video 10 +	1 Video 14 +	1 Data B +
2 Video 2 -	2 Video 6 -	2 Video 10 -	2 Video 14 -	2 Data B -
3 Video 3 +	3 Video 7 +	3 Video 11 +	3 Video 15 +	3 Data C +
4 Video 1 -	4 Video 5 -	4 Video 9 -	4 Video 13 -	4 Data A -
5 Video 1 +	5 Video 5 +	5 Video 9 +	5 Video 13 +	5 Data A +
6 Video 3 -	6 Video 7 -	6 Video 11 -	6 Video 15 -	6 Data C -
7 Video 4 +	7 Video 8 +	7 Video 12 +	7 Video 16 +	7 Data D +
8 Video 4 -	8 Video 8 -	8 Video 12 -	8 Video 16 -	8 Data D -

### Control Room Video

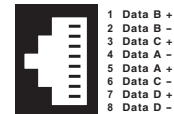
UTP video signals are passed through the unit and delivered to the control /MDF room via rear-panel RJ 45 connectors:



See below for additional channels

### 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:



### Power Input

On-off switch	Rear panel
Voltage	115 / 230 VAC
Current	2.5 / 1.25 Amps
Frequency	50 / 60 Hz
Protection	5A slo-blo 8x20 mm fuse & thermal shutdown
Wattage	300 Watts
Heat	1000 BTU/hour

### Environmental

Ambient Temperature	0 to +140° F (-20 to +50° C)
Minimum airflow	4 ft <sup>3</sup> /min (0.1 m <sup>3</sup> /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 483mm wide, 44mm high, 305mm deep
Weight	22lb (10kg)
Mounting	Wall, desk, or rack mount, brackets included

### Regulatory



Specifications subject to change without notice.

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