



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, miscables, 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 cable. Designed for installation in the cabling/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 cabling 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

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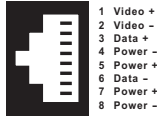


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Technical Specifications

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 Cat 5 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.

Cable Distance

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

CAMERA POWER DISTANCE			
Power Supply Voltage	24 VAC	28 VAC	12 VDC
Resultant Camera Voltage	21 VAC	21 VAC	11.5 VDC
100 mA B&W Camera			
2-pair 24 AWG	300m	760m	50m
2-pair 23 AWG (Cat6)	460m	1.2km	90m
300 mA Color Camera			
2-pair 24 AWG	107m	260m	15m
2-pair 23 AWG (Cat6)	180m	425m	30m
1 Amp P/T/Z Camera			
2-pair 24 AWG	30m	75m	4m
2-pair 23 AWG (Cat6)	45m	120m	9m

UTP cable should be Cat 5 or better. Low-voltage camera power, video, and RS-422 or RS-485 data may reside within the same cable bundle, however do not run 24 or 28VAC within the same cable 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-cabling detected
 Red Overload shutdown condition

Camera Connections

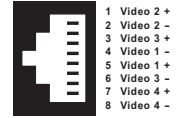
Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
1 Video 1 + 2 Video 1 - 3 Data A + 4 Power 1 - 5 Power 1 + 6 Data A - 7 Power 1 + 8 Power 1 -	1 Video 2 + 2 Video 2 - 3 Data A + 4 Power 2 - 5 Power 2 + 6 Data A - 7 Power 2 + 8 Power 2 -	1 Video 3 + 2 Video 3 - 3 Data A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

Control Room Connections

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

Control Room Video

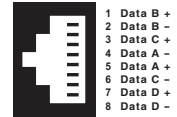
UTP video signals are passed through the unit and delivered to the control/MDF room via rear-panel RJ 45 connectors:



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 ³ /min (0.1 m ³ /min)
Humidity (non-condensing)	0 to 95%
Transient Immunity	per ANSI 587 C62.41

Mechanical

Dimensions, including connectors
 19 in wide, 1.73 in high, 12 in deep
 483 mm wide, 44 mm high, 305 mm deep

Weight 22 lb (10kg)

Mounting Wall, desk, or rack mount, brackets included

Regulatory



Specifications subject to change without notice.

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