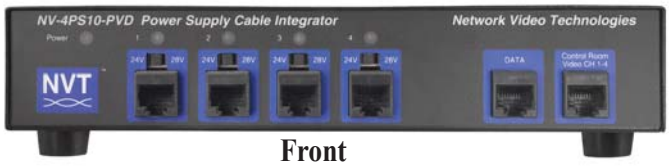
# Model NV-4PS10-PVD Power Supply Cable Integrator Hub




Front


Rear

## Features:

- **Provides Class 2 SELV camera power and pass-through video & telemetry data connectivity for up to 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 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 or the NV-226J-PV transceiver 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 the NV-216A-PV (power-video only) NV-218A-PVD, or NV-226J-PV 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. 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.

**Network Video Technologies**
4005 Bohannon Drive • Menlo Park, CA • 94025 • USA
(+1) 650.462.8100 • 800.959.9870 • FAX (+1) 650.326.1940
nvt.com • info@nvt.com

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

## Technical Specifications

### Camera Power-Video-Data Connections

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


### 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. Each output is individually thermistor protected.

### Wire Distance

Supply voltage, wire resistance and minimum camera operating voltage determine the maximum camera distance. Assume a minimum 21VAC or 11.5 VDC at the camera:

| Standard Distance | NV-216A-PV at the 24 VAC Camera | |
|---|---|---|
| **Power Supply Voltage** | **24 VAC** | **28 VAC** |
| B&W Camera 24 VAC, 100 mA, 2.4 W | | |
| 2-pair 24 AWG | 807ft (246m) | 2,100ft (640m) |
| 2-pair 23 AWG (Cat6) | 1,018ft (310m) | 2,647ft (1km) |
| Color Camera 24 VAC, 200 mA, 4.8 W | | |
| 2-pair 24 AWG | 404ft (123m) | 1,050ft (320m) |
| 2-pair 23 AWG (Cat6) | 509ft (155m) | 1,324ft (403m) |
| Color Camera 24 VAC, 300 mA, 7.2 W | | |
| 2-pair 24 AWG | 268ft (82m) | 699ft (213m) |
| 2-pair 23 AWG (Cat6) | 339ft (103m) | 882ft (269m) |

| Pan/Tilt/Zoom | NV-218A-PVD at the 24 VAC Camera | |
|---|---|---|
| **Power Supply Voltage** | **24 VAC** | **28 VAC** |
| P/T/Z Camera 24 VAC, 1 Amp, 24 W | | |
| 2-pair 24 AWG | 90ft (27m) | 210ft (64m) |
| 2-pair 23 AWG (Cat6) | 110ft (33m) | 265ft (80m) |

| Extended Distance | NV-226J-PV at the 12 VDC Camera | |
|---|---|---|
| **Power Supply Voltage** | **24 VAC** | **28 VAC** |
| B&W Camera 12 VDC, 100 mA, 1.2 W | | |
| 2-pair 24 AWG | 3,000ft (1km) | 3,000ft (1km) |
| 2-pair 23 AWG (Cat6) | 3,000ft (1km) | 3,000ft (1km) |
| Color Camera 12 VDC, 200 mA, 2.4 W | | |
| 2-pair 24 AWG | 1,569ft (478m) | 2,136ft (650m) |
| 2-pair 23 AWG (Cat6) | 1,978ft (602m) | 2,693ft (821km) |
| Color Camera 12 VDC, 300 mA, 3.6 W | | |
| 2-pair 24 AWG | 1,046ft (318m) | 1,424ft (434m) |
| 2-pair 23 AWG (Cat6) | 1,319ft (402m) | 1,795ft (547m) |
| Color Camera 12 VDC, 400 mA, 4.8 W | | |
| 2-pair 24 AWG | 784ft (239m) | 1,068ft (325m) |
| 2-pair 23 AWG (Cat6) | 989ft (301m) | 1,346ft (410m) |

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 |

### 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 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 | 100 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
9.25 in wide, 1.75 in high, 7.25 in deep
235 mm wide, 44.5 mm high, 184 mm deep

Weight — 7lb (3.2 kg)

Mounting — Wall, or desk mount

### Regulatory

Specifications subject to change without notice.

### Camera Connections

| 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 Connections

| Channels 1-4 | Telemetry / Data |
|---|---|
| 1 Video 2 + | 1 Data 2 + |
| 2 Video 2 - | 2 Data 2 - |
| 3 Video 3 + | 3 Data 3 + |
| 4 Video 1 - | 4 Data 1 - |
| 5 Video 1 + | 5 Data 1 + |
| 6 Video 3 - | 6 Data 3 - |
| 7 Video 4 + | 7 Data 4 + |
| 8 Video 4 - | 8 Data 4 - |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411-1255-1-A