



Model NV-8PS13-PVD Power Supply Passive Video Receiver Hub



Front



Rear

Features:

- ▶ Provides 24VAC camera power while receiving video transmission and delivering P/T/Z telemetry all over a single 4-pair Cat5 cable.
- ▶ Standard telecom/datacom structured cabling pinouts per EIA/TIA 568B
- ▶ Independently selectable 24VAC-OFF-28VAC with 1 Amp per channel
- ▶ Automatic-reset fault protection; transient protection
- ▶ Individually floating outputs ensure total ground-loop immunity
- ▶ Diagnostic LEDs show load/no load, short-circuits, 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; 20 cm deep; wall, desk, or rack-mountable
- ▶ Limited lifetime warranty



The 8-channel NV-8PS13-PVD is a key hybrid component that consolidates all CCTV system cabling using standard EIA/TIA 568B structured building wiring. Designed for installation in the IDF/Telecom Closet or MDF/Equipment Room, the Power Supply Passive Video Receiver Hub has independently selectable 24VAC-OFF-28VAC outputs that can support at-distance camera loads up to 1 Amp per channel. Use with NVT's NV-216A-PV or NV-218A-PVD for cable runs under 100m. A built-in passive receiver hub allows connection to DVR or an encoder for IP transmission. Per-channel diagnostic LEDs display load/no-load, short-circuits, or fault conditions at a glance. Automatic-reset fault protection, transient protection, and ground loop free individually floating outputs. All NVT products are UL and cUL listed, and compliant with CE, RoHS, WEEE and come with NVT's lifetime warranty.

Network Video Technologies Ltd.

NVT House, 99 Waldegrave Road • Teddington • Middlesex • TW11 8LA • United Kingdom
Tel: +44 (0) 208 977 6614 • Fax: +44 (0) 208 973 1855
nvtuk.com • uksales@nvt.com



Model NV-8PS13-PVD

Power Supply Passive Receiver Hub

Technical Specifications

Video

Frequency response	DC to 5 MHz
Attenuation	0.5 dB typ
Common-mode / Differential-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 channel

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 for auto-reset after fault removal.

Power

Voltage	115 / 230 VAC
Current	2.5 / 1.25 Amps
Wattage	250 Watts
Heat	200 BTU/hour

Front-Panel LEDs

System Power Blue LED

Per-channel LED indicates:

Off	no load connected
Green	load connected & working
Amber	short-circuit detected
Red	overload fault condition

Environmental

Ambient Temperature	-20 to +50° C (0 to +140°F)
Minimum airflow	0.5m ³ /min (20 ft ³ /min)
Humidity (non-condensing)	0 to 95%
Transient Immunity	per ANSI 587 C62.41

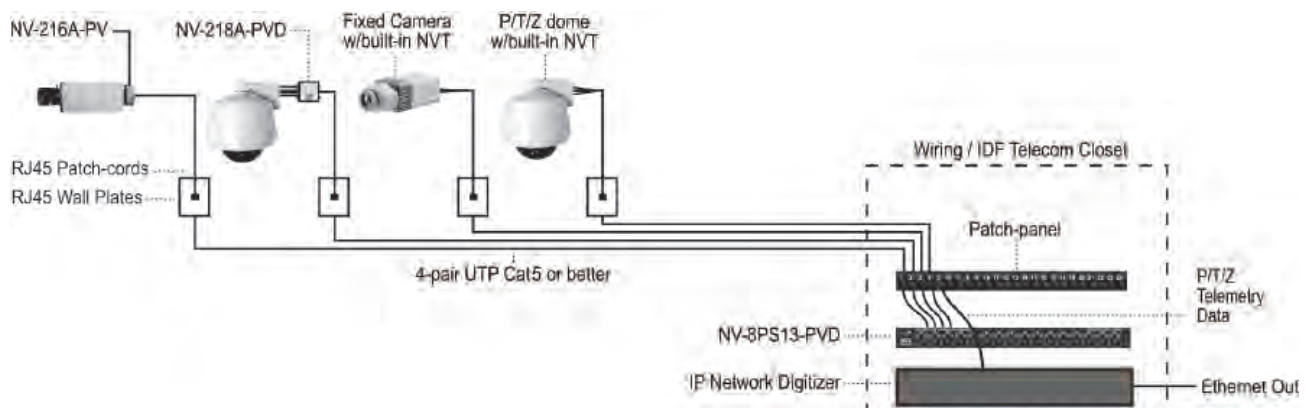
Mechanical

Dimensions, including connectors	483 mm wide, 44 mm high, 203 mm deep 19in wide, 1.73 in high, 8 in deep
Weight	NV-8PS13-PVD 5.4kg (12 lb)

Accessories

Mounting	Rack mount "L" brackets for front, rear, or wall installations: rubber feet for desk installation
Cables	NV-8PS13-PVD Eight 60cm (2ft) coax jumpers

Regulatory



Network Video Technologies Ltd.

NVT House, 99 Waldegrave Road • Teddington • Middlesex • TW11 8LA • United Kingdom

Tel: +44 (0) 208 977 6614 • Fax: +44 (0) 208 973 1855

nvt.com • uksales@nvt.com



NV-8PS13-PVD

Power Supply Passive Receiver Hub

Technical Specifications

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
100 mA Camera		
2-pair 24 AWG 0.51mm	655m*	280m*
2-pair 23 AWG 0.57mm (Cat6)	823m*	354m*
300 mA Camera		
2-pair 24 AWG 0.51mm	216m*	91m*
2-pair 23 AWG 0.57mm (Cat6)	274m*	116m*
1 Amp Camera		
2-pair 24 AWG 0.51mm	64m*	27m*
2-pair 23 AWG 0.57mm (Cat6)	82m*	33m*

*Actual distance will depend on the camera's inrush & operating current, minimum operating voltage, and the wire's environmental temperature. Please consult NVT Customer Support for further information.

Note: UTP 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 24VAC or 28VAC within the same wire bundle as other telecom or datacom signals.

Camera Power-Video-Data Connections

Eight front-panel RJ45 outputs support up to sixteen fixed or P/T/Z telemetry cameras over 4-pair UTP Cat 5 or better.



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

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:



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

Specifications subject to change without notice.

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 -

Control Room Connections

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

Network Video Technologies Ltd.

NVT House, 99 Waldegrave Road • Teddington • Middlesex • TW11 8LA • United Kingdom

Tel: +44 (0) 208 977 6614 • Fax: +44 (0) 208 973 1855

nvt.com • uksales@nvt.com

PVD™ transmission know-how from NVT. Knowledge is power.

Enjoy high performance, proven reliability and huge savings with camera Power, Video reception & Data transmission (PVD™).

Take a look at the impressive new **NV-8PS13-PVD & NV-16PS13-PVD Power Supply Video Receiver Hubs** from NVT. Effectively three products in one, these incredibly compact units offer either an 8 or 16 channel camera power supply, each with a built-in UTP video transceiver.

They provide independently selectable 24VAC-OFF-28VAC camera power with 1 amp per channel*, while receiving video transmission. And, by powering from a central location, you make everything simple, saving stacks of time and a fortune in cabling infrastructure costs.

You can consolidate all CCTV system cabling using standard structured building cabling, allowing transmission choice flexibility and delivering P/T/Z telemetry – all over a single 4-pair Cat5 cable. Even smarter, the built-in UTP passive transceiver allows easy connection to a DVR or an A/D encoder for IP transmission.

It all adds up to some extremely powerful reasons why you should get to know more, today.



PVD™ from

Tel. 0208 977 6614 E-mail: uksales@nvt.com nvt.com

