

Vi1516VPD

16-Ch Powered VPD Combiner with UTP Receiver

Features

- Supports up to 16 cameras by providing Video, class II Power, and Data on a single Cat-5 cable per camera for up to 750 feet (230m)
- Built-in passive transceivers with surge protection
- 16 isolated camera power individually selectable 24 or 28 VAC at 1 A max per channel, 12 A aggregated
- A glass fuse per channel, accesable from front panel
- Use with the Vi1053VPD transceiver at the camera
- Power present and fault indicator LEDs for each camera
- 60 dB cross talk and noise suppression on video signals
- 19", low profile 1U wall or rack-mountable
- 1U high wall or rack-mountable, 12" deep
- Cooling fans with temperature control
- Designed for structured wiring applications
- Limited Lifetime warranty



Applications

- Security and Surveillance
- Department Store and Casino Security
- Schools, Hospitals, Airports
- Structured Wiring Applications

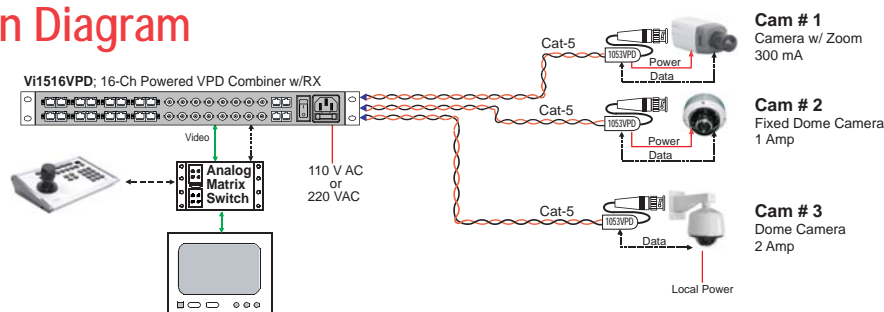
Power Distance Chart

Power Supply Voltage	12 VDC	24 VAC	28 VAC
Voltage at the camera	11.5 VDC	21 VAC	21 VAC
100 mA Camera	Dual 24 AWG	175 ft	1,000 ft
	Dual 22 AWG	300 ft	1,500 ft
300 mA Camera	Dual 24 AWG	50 ft	350 ft
	Dual 22 AWG	100 ft	600 ft
1 Amp Camera	Dual 24 AWG	15 ft	100 ft
	Dual 22 AWG	30 ft	150 ft

The Vi1516VPD is a passive transeceiver device that also combines video, PTZ data, and camera power over a single 4-pair UTP cable to simplify CCTV installations in a structured wiring environment. It supports up to 16 cameras for up to 750 feet and is designed to be installed in the control room. The Vi1516VPD has a 16-ch fully isoplated class II built-in 28/24 VAC power supply. Each camera power output is equipped with a 2 A glass fuse accessible from front panel for extra protection.

At the camera end the Vi1053VPD video balun/combiner provides Video, power and data on separate outputs. The video connections are through 16 BNC Connectors and to the DVR or matrix switches. The data connections to the DVR are through 4-pair RJ-45 cables. There is a separate data connection for each camera. All equipment follow industry-standard EIA/TIA 568B pinouts. The Vi1516VPD is an ideal CCTV component for structured cabling environment.

Application Diagram



Technical Specification*

Electrical

Input Voltage	110 VAC or 220 VAC, internally switch selectable
Input Current	4.8 Amps (110 VAC) / 2.4 Amps (220 VAC)
Camera Power	Voltage: Isolated Class II, 24 V AC, off, 28V AC Rear Panel switch selectable Current: 1 A Max per camera, 12 A Max aggregated Power: 340 VA
Fault Protection	2 A glass fuse (front access) per camera
Video Format	NTSC, PAL, SECAM
Frequency	20 Hz to 10 MHz
CMRR	60 dB
Twisted Pair (UTP)	100 Ohms +/- 20%, 24 AWG min, Category 2-7
Diagnostics LEDs	No Load or Shut down: 16 Red LEDs, one per channel Power Present: 16 Green LEDs, one per channel
Connectors	Camera Connection: RJ-45 Connector Data: RJ-45 Connector Control Room Video: BNCs
Transient Immunity	per ANSI 587 C62.41

Ordering Information

PART No.	Description
Vi1508VPD	8-Ch Powered VPD Combiner-Receiver
Vi1516VPD	16-Ch Powered VPD Combiner-Receiver

System Configuration



Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: -20C to +50C Storage: -30C to +70C
Minimum Airflow	5 ft /min
Heat	1300 BTU/hour

Mechanical

Dimensions	1.75x17x12 Inches, 4.3x43x30.5 cm (HxWxL)
Weight	22 Lb, 10 Kg
Material	Steel Sheet Metal

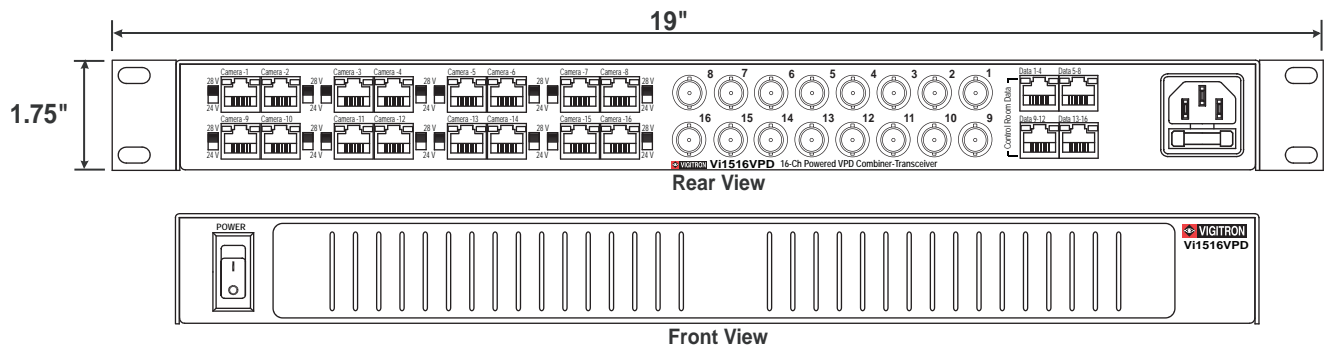
*Specifications subject to change without notice.

Camera Connections:

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

Control Room Data Connections:

Pin#	Data Group	Related Cameras
1	Data-A +	Camera 1,2,3,4
2	Data-A -	
3	Data-B +	Camera 5,6,7,8
4	Data-C -	
5	Data-C +	Camera 9,10,11,12
6	Data-B -	
7	Data-D +	Camera 13,14,15,16
8	Data-D -	



Wire and Cable Recommendations

The Vigitron products are designed to be used with unshielded twisted pair (UTP) wiring. The UTP wire must be 24AWG - 12AWG or Category 2 - 7 cable. Multi-pair cable with an overall shield is acceptable, however individually shielded pairs should be avoided, Multiple UTP Video feeds can be operated in the same communication cable along with telephone, computer, control signals and low power voltages. While UTP video may be routed through punch-down block terminals, any resistive, capacitive or inductive devices (such as T-taps or MOV's) must not be used, . For more specific information regarding wire types and proper installation techniques, please contact Vigitron for technical assistance.



TEL (+1) 858-484-5209 • FAX (+1) 858-484-1205
13906 Sparren Ave. San Diego, CA 92129, USA • info@vigitron.com • www.vigitron.com