

# Vi1216VPD

## 16-Ch UTP Transceiver with VPD Combiner

### Features

- Combines Video, Power, and Data into a single RJ-45 4-pair cable for up to 750 feet (250m)
- Supports up to 16 cameras
- Built-in passive transceivers with surge protection
- Power present indicator for each camera
- 60 dB cross talk and noise immunity
- 19", low profile 1U wall or rack-mountable
- Individual 1.5 A self-resetting power fuse for each channel
- Can use any third party class 2 power supply
- Designed for structured wiring applications
- Limited Lifetime warranty



### Applications

- Security and Surveillance
- Department Store Security
- Casino Security
- Hospitals and Airports
- School Campuses

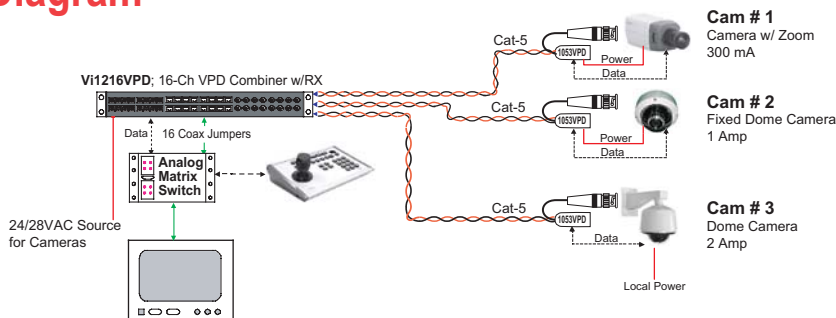
### Power Distance Chart

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	2,500 ft
	Dual 22 AWG	300 ft	1,500 ft	4,000 ft
300 mA Camera	Dual 24 AWG	50 ft	350 ft	850 ft
	Dual 22 AWG	100 ft	600 ft	1,400 ft
1 Amp Camera	Dual 24 AWG	15 ft	100 ft	250 ft
	Dual 22 AWG	30 ft	150 ft	400 ft

The Vi1216VPD is a passive transeceiver device that 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 Vi1216VPD receives low-voltage camera power from any third-party multi-output Class 2 power supply. Each camera power output is equipped with a self-resetting fuse for extra protection.

At the camera end the Vi1053VPD video balun/combiner provides Video, power and data on separate outputs. The Vi1216VPD should be installed at the "Head End". The video connections are through 16 BNC connectors and Coax cables to the DVR. The data connections to the DVR are through 4-pair RJ-45 cables. All equipment follow industry-standard EIA/TIA 568B pinouts. The Vi1216VPD is an ideal CCTV component for structured cabling environment.

### Application Diagram



# Technical Specification\*\*

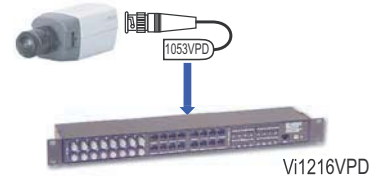
## Electrical

Video Format	NTSC, PAL, SECAM
Frequency	20 Hz to 6 MHz
Coax	75 Ohm
Twisted Pair	100 Ohms +/- 20%, 24 AWG min up to 1000 feet (305 m)* Unshielded Category 2-5
CMRR	60 dB
Video Present	Green LED for each channel
Power Indicator	16 Green LEDs, one per channel
Connectors	UTP and Data: RJ-45 Connector Video outputs: BNC Connector Power: Screw-less Connectors
Transient Immunity	6000V, 1.2 uS x 50 uS

## Ordering Information

PART No.	Description
Vi1204VPD	4-Ch VPD Combiner/w RX
Vi1216VPD	16-Ch VPD Combiner/w RX

## System Configuration



## Environmental

Humidity	0 to 95%, non-condensing
temperature	Operating: -10C to +70C Storage: -30C to +70C

## Mechanical

Dimensions	1.75x17.0x3.0 Inches, 4.3x43x7.5 cm (HxWxL)
Weight	3.5 Lb, 1600 g
Material	Aluminum Sheet Metal

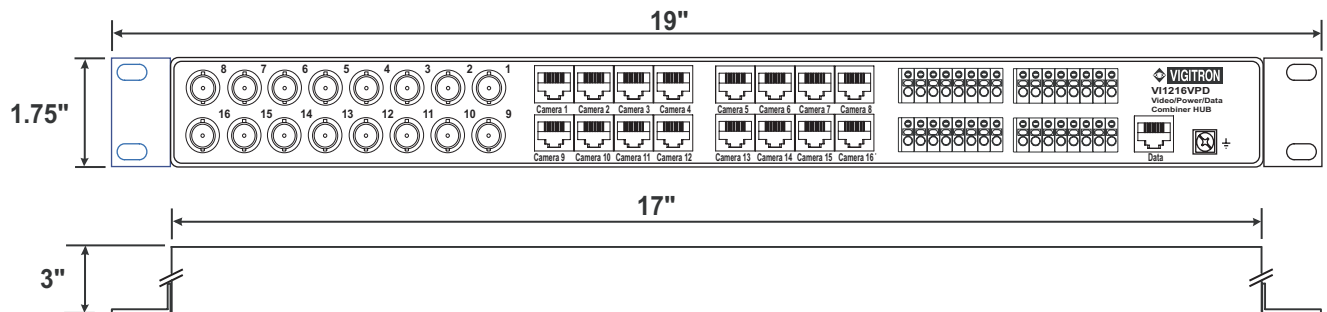
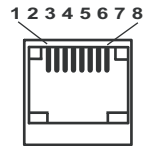
\*It is recommended not to exceed 750 feet (250m) when using with digital equipment.  
\*\*Specifications subject to change without notice.

### Camera Connections

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

### Control Room Connections

Telemetry
1 Data-B +
2 Data-B -
3 Data-C +
4 Data-A -
5 Data-A +
6 Data-C -
7 Data-D +
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.



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