Vi1316VPD

16-Ch UTP Video, Data, & Power Combiner

Features

- Combines Video, Power, and Data into a single RJ-45 4-pair cable
- · Supports up to 16 cameras
- · Power present indicator for each camera
- Individual 1.5 A self-resetting power fuse for each channel
- 19", low profile 1U rack-mountable
- · Can use any third party class 2 power supply
- · Designed for structured wiring applications
- Limited Lifetime warranty



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



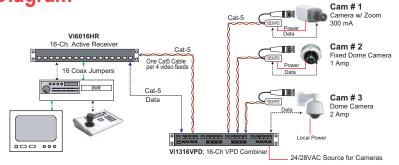
Power Distance Chart

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 Vi1316VPD is a passive "pass-through" 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 and is designed to be installed in the wiring closet or control room. The VI1316VPD 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 VI1316VPD can be installed at a mid-way location or at the "Head End". The video and data connections to the control room are through 4-pair RJ-45 cables. Control Room connections may be made using any Vigitron passive or active HUBs with RJ-45 connections. All equipment follow industry-standard EIA/TIA 568B pinouts. The Vi1316VPD is an ideal CCTV component for a structured cabling environment.

Application Diagram





Technical Specification**

Electrical

Video Format NTSC, PAL, SECAM Frequency DC to 10 MHz Coax 75 Ohm

Twisted Pair 100 Ohms +/- 20%, 24 AWG min

up to 1000 feet (305 m)* Unshielded

Category 2-5

Power Inputs 16 individually fused at 1.5 A Max.

Power Indicator 16 Green LEDs, one per channel

Connectors Video and Data: RJ-45

Environmental

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

Mechanical

Dimensions 1.73x19x1 Inches, 4.4x48.2x2.5 cm (HxWxL)m)

Weight 0.9 Lb (0.43 Kg)
Material Aluminum Sheet Metal

*It is recommended not to exceed 750 feet (250m) when using with digital equipment.

Camera Connections

Video		
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

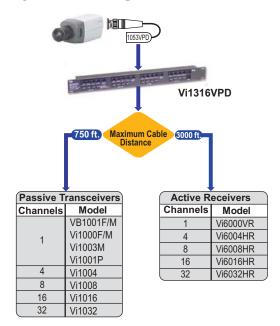
Video	Telemetry
1 Video-2 +	1 Data-B +
2 Video-2 -	2 Data-B -
3 Video-3 +	3 Data-C +
4 Video-1 -	4 Data-A -
5 Video-1 +	5 Data-A +
6 Video-3 -	6 Data-C -
7 Video-4 +	7 Data-D +
8 Video-4 -	8 Data-D -

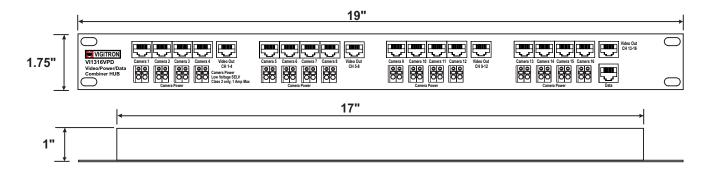


Ordering Information

PART No.	Description
Vi1304VPD	4-Ch VPD Combiner
Vi1316VPD	16-Ch VPD Combiner

System Configuration





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.



^{**}Specifications subject to change without notice.