

# Vi1053VPD

## UTP Transceiver with VPD Combiner

### Features

- Combines Video, Power, and Data into a single RJ-45 4-pair cable for up to 1000\* feet (305m)
- NTSC, PAL, and SECAM video format
- Built-in passive transceivers with surge protection
- Support for "up-the-Coax" type signals
- 60 dB cross talk and noise immunity
- Compact size and easy installation
- 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

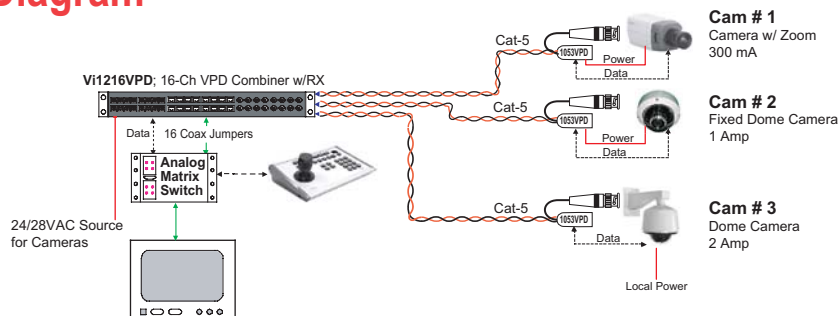
Power Supply Voltage		12 VDC	24 VAC	28 VAC
Voltage at the camera		11.5 VDC	21 VAC	21 VAC
100 mA Camera	Dual 24 AWG	175 ft	1,000 ft	2,500 ft
	Dual 22 AWG	300 ft	1,500 ft	4,000 ft
300 mA Camera	Dual 24 AWG	50 ft	350 ft	850 ft
	Dual 22 AWG	100 ft	600 ft	1,400 ft
1 Amp Camera	Dual 24 AWG	15 ft	100 ft	250 ft
	Dual 22 AWG	30 ft	150 ft	400 ft

The Vi1053VPD is a passive device that transports a single channel of video, RS-422/RS-485 data, and camera power over Cat-5 cable for distances up to 1,000 feet\* (305 m). Its extremely compact size makes it possible to be used in variety of applications. It may be used with the Vi12XXVPD series for shorter distances and with Vi13XXVPD for longer distances.

The Cat-5 cable connects to a compact module/balun via RJ-45. The module has a set of break-out cables; one pair each for Power and data, and a Coax cable with BNC for video. For longer distance runs, it can be used with Vigitron Multi-channel VPD Combiners and Active UTP Receivers to centralize power and extend video up to 3,000 feet. (1,000 m).

The Vi1053VPD has built-in surge suppression to protect video equipment against damaging voltage spikes. Its exceptional noise immunity ensures quality video signals. The Vi1053VPD is an ideal CCTV component for a structured cabling environment.

### Application Diagram



The smart choice for quality video



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DSVi1216VPD\_0805

# 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
CMRR	60 dB
Insertion Loss	0.3 dB
Connectors	UTP: RJ-45 Video: 9 inch coax with male BNC Power: 9 inch twisted pair Data: 9 inch twisted pair
Transient Immunity	6000V, 1.2 uS x 50 uS

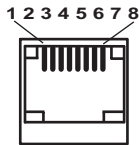
## Environmental

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

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

## Camera Connections

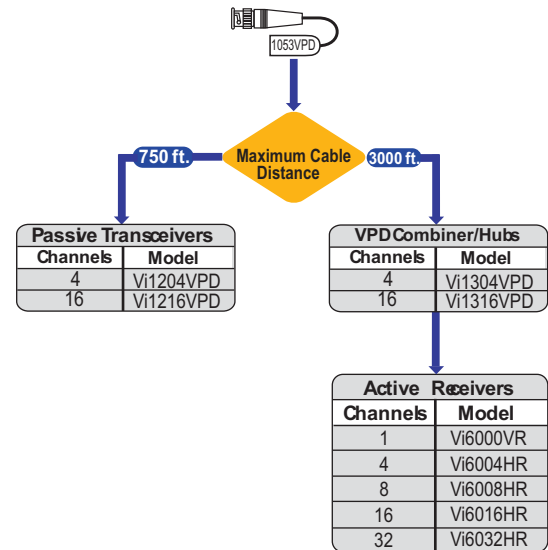
Video	
1	Video-1 +
2	Video-1 -
3	Data-A +
4	Power-1 -
5	Power-1 +
6	Data-A -
7	Power-1 +
8	Power-1 -



## Ordering Information

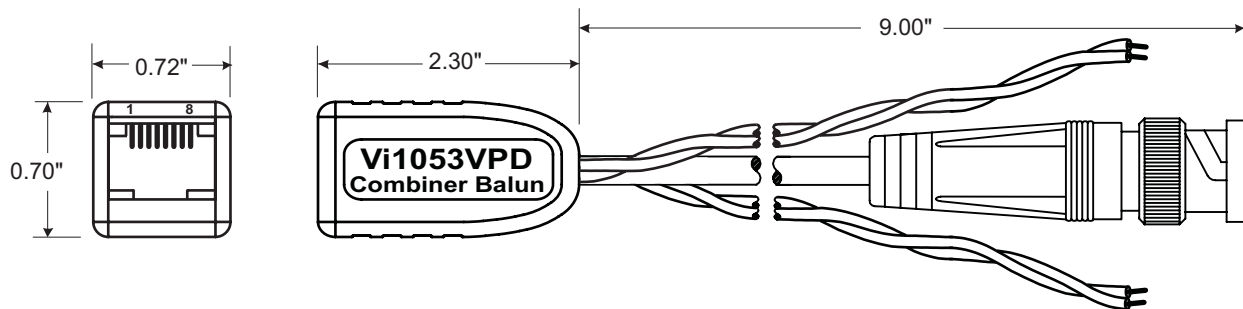
PART No.	Description
Vi1053VPD	VPD Combiner/w RX

## System Configuration



## Mechanical

Dimensions	2.3x0.72x0.7 Inches, 5.8x1.8x1.77 cm (HxWxL)
Weight	0.05 Lbs (022 g)
Material	Bone ABS Plastic, UL rating of 94V-0



## 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