

## Passive video Balun Model FS-4301VPD

### Features:

#### 1-CH Passive Video, Power&Data Transceiver (12V/24V DC/AC)

- Full-motion color video signal up to 1300ft (400m) and monochrome (B&W) up to 1950ft (600m) via UTP cat5e/6
- Transmit power signal up to 650ft/200m
- Transmit data signal up to 1000ft (300m)
- Male BNC with extended mini-coax pigtail
- RJ45 Jack for UTP cable
- NTSC, PAL & SECAM video format compatible
- Real-time transmission
- No power required
- Exceptional interference rejection
- Built-in TVS(Transient Voltage Suppressors) for surge protection
- Lightning protection design Grade:III
- 50 dB crosstalk and noise immunity
- Wave Filter Design, Anti-Static Design
- Compact size and easy installation
- ABS engineering plastic housing



### Overview:

The FS-4301VPD video balun is a passive (non-amplified) device that allows the transmission of real-time CCTV video signal via cost-effective Unshielded Twisted Paired(UTP) cable.

Baseband (composite) signals of any type are support.

Used in pairs, FS-4301VPD eliminates costly and bulky coaxial cable, allowing live CCTV color video signal up to 1300ft (400m), power transmission up to 650ft (200m) and PTZ signal up to 1000ft (300m). FS-4301VPD is also compatible with all the other passive transceiver for application at distance up to 1300ft(400m) and active receiver up to 2200ft(700m).

The superial interference rejection and low emissions of the FS-4301VPD allow video signals to coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits.

This allows the use of a shared or existing cable plant. FS-4301VPD has built-in surge suppression to protect video equipment against damaging voltage spikes.

Its crosstalk and noise immunity ensure quality video signals.

### Applications:

- Security Monitoring System
- Multimedia Network Teaching System
- Medical Monitoring Display System
- Industrial Automation Control System
- Banking, securities, financial information display system
- Remote Network Server Monitoring
- Department Store Security
- Casino Security
- Hospitals, Airports and banks
- School Campuses

## Passive video Balun Model FS-4301VPD

### Wire and Cable Recommendations:

FS-4301VPD is recommended to use with Unshielded Twisted Paired (UTP) wiring from 24AWG through 22AWG.

Individually shielded pairs should be avoided, as they reduce the operating range of the systems drastically.

Multi-pair cable (25-pair or more) with an overall shield are acceptable.

Video signals can coexist in the same wire bundle as telephone, datacom, or low-voltages power circuits.

While video may be routed through telephone punch-down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices MUST BE removed from the pair.

For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.

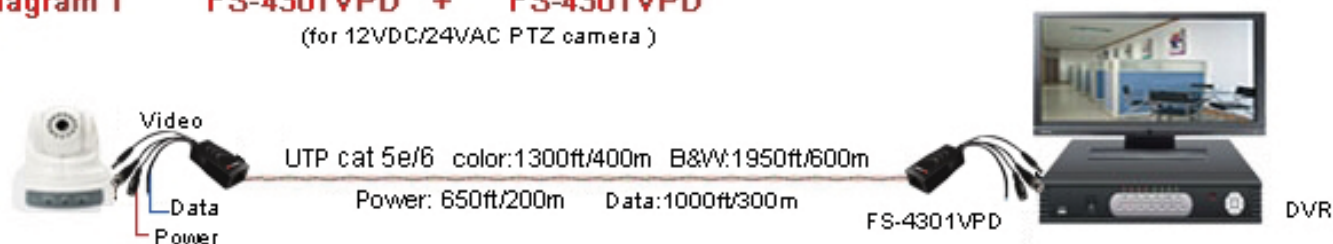
### Technical Specifications:

Product Name		Single Channel Passive Video and Power Transceiver ( FS-4301VPD )
Applied Devices		CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment
Video	Video Format	PAL, NTSC, SECAM
	Operating Frequency	DC to 5MHz
	Max Distance	UTP Category 5e (24AWG) Color: 1300ft(400m) B&W: 1950ft(600m)
	Common-mode/Differential-mode rejection	15 KHz to 5 MHz 60 dB typ
	Impedance	Coax, Male BNC 75Ω unbalanced UTP,RJ45 100Ω balanced
Wire Type	Attenuation	1.5 dB typ Max
	Network Wiring	One Unshielded Twisted Pair (for each video signal) 24-16 AWG (0.5-1.31mm)
	Category Type	2 or better
	Impedance	100 ± 20 ohms
	DC Loop Resistance	52 ohms per 1,000ft (18 ohms per 100m)
Power	Differential Capacitance	19 pF/ft max (62 pF/m max)
	Power Input	No external power required
Power transmission		12V/24V,DC/AC, up to 650ft(200m) via UTP cat5e/6
PTZ signal	Transmission distance	Up to 1000ft(300m) via UTP cat5e/6
Connector	Video input/output	Male BNC connector
	Video input/output	RJ45 Jack
Protection	Surge Protection	renewable solid state surge protection
	Video Input	2KV(common mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
	Video Output	2KV(different mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
Mechanical	Housing	ABS engineering plastic
	Body Color	Black
	Dimensions(L*W*H)	60.4*29*20.4mm (BNC connector & cable excluded)
	Net Weight	65g
Environmental	Operating Temperature	-20° ÷ 70° C
	Relative Humidity	0~95% (non-condensing)
	Storage Temperature	-40° ÷ 150° C

## Passive video Balun Model FS-4301VPD

### Application Diagram:

**Diagram 1 FS-4301VPD + FS-4301VPD**  
(for 12VDC/24VAC PTZ camera )



**Diagram 2 FS-4301VPD + FS-4504VPDS**  
(for 24VAC PTZ camera )

