

### Model FS-4301VP-II

#### **Features**

- 1-CH Passive Video & Power Transmitter & Receiver (12V/24V DC/AC)
- •Color video signal up to 1312ft(400m)via UTP cat5e/6
- •Transmit power signal up to 820ft(250m) in pairs
- •Male BNC with extended mini-coax pigtail
- •Tool-less push-pin terminals for UTP cable
- •NTSC, PAL & SECAM video format compatible
- •Real-time transmission
- No power required
- •Exceptional interference rejection
- •Built-in TVS 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**

FS-4301VP- II 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-4301VP- II eliminates costly and bulky coaxial cable, allowing live CCTV color video signal up to 1312ft (400m), power transmission up to 820ft(250m).

The superior interference rejection and low emissions of the FS-4301VP- II 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-4301VP- II has built-in surge suppressor to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.



## Video & Power Balun



## **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

#### Wire and Cable Recommendations

FS-4301VP-II 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.

1	2 3 4 5 6 7 8	
1	Orange	
2	Orange+white	
3	Green+white	
4	Green	
5	Blue+white	
6	Blue	
7	Brown+white	
8	Brown	



# Video & Power Balun



## **Technical Specifications**

Model		FS-4301VP-II
Product Name		Single Channel Passive Video and Power Transmitter & Receiver
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: 1312ft(400m) B&W: 1968ft(600m)
	Common-mode/Differential-mode rejection	15 KHz to 5 MHz 60 dB typ
	Impedance	Coax, Male BNC 75 ohms
	impedance	UTP, push-pin terminals 100 ohms
	Attenuation	0.5 dB typ
Wire Type	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)
	Differential Capacitance	19 pF/ft max (62 pF/m max)
Power	Power Input	No external power required
	Power transmission	12V/24V,DC/AC, up to 820ft(250m) via UTP cat5e/6
Connector	Video input/output	Male BNC connector
	Video input/output	push-pin terminals
Protection	Surge Protection	Built-in Transient Voltage Suppressor(TVS)
	Antistatic	YES
Mechanical	Dimensions(L*W*H)	65*36*25mm (BNC connector & cable excluded)
	Housing	ABS engineering plastic
	Body Color	Black
	Net Weight	60g
Environmental	Operating Temperature	-25° ~ 75° C
	Relative Humidity	0~95% (non-condensing)
	Storage Temperature	-40° ∼ 150° C





## **Application Diagram**

