

Model FS-4301VPCT

Features

1-CH Passive Video & Power Transmitter

- Convert 28V~36VDC to regulated 12VDC at camera
- Color video up to 1312ft(400m) via UTP cat5e/6
- Power up to 1000ft(305m) with 28VDC & 36VDC power balun receiver hub for 12VDC output camera
- 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 housing



Overview

The FS-4301VPCT 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 supported.

FS-4301VPCT convert 28V~36VDC to regulated 12VDC at Camera; While used with 4/8/16 port 28VDC & 36VDC power balun receiver hub, FS-4301VPCT eliminates costly and bulky coaxial cable, allowing live CCTV color video signal up to 1312ft (400m)and power transmission up to 1000ft(305m).

The superior interference rejection and low emissions of the FS-4301VPCT allows 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-4301VPCT has built-in surge suppressor 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

Wire and Cable Recommendations

FS-4301VPCT 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.

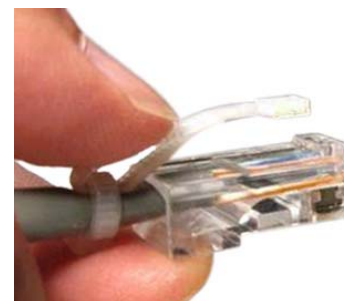
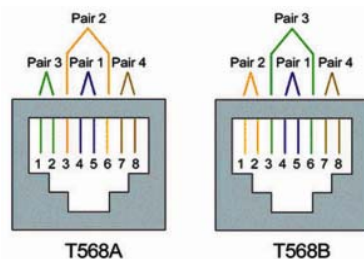
For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.

	1	2	3	4	5	6	7	8
T568A:	White Green	Green	White Orange	Blue	White Blue	Orange	White Brown	Brown
T568B:	White Orange	Orange	White Green	Blue	White Blue	Green	White Brown	Brown

1 2 3 4 5 6 7 8



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



Technical Specifications

Model		FS-4301VPCT	
Product Name		Single Channel Passive Video and Power Transmitter	
Function		Convert 28V~36VDC to regulated 12VDC at camera	
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
		UTP,RJ45	100 ohms
Attenuation		0.5 dB typ	
Wire Type	Network Wiring	One Unshielded Twisted Pair (for each video signal) 24-16 AWG (0.5-1.31 mm)	
	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	Convert 28V~36VDC to regulated 12VDC, up to 1000ft(305m) via UTP cat5e/6	
Connector	Video input/output	Male BNC connector	
	Video input/output	RJ45 Jack	
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

FS-4301VPCT+FS-4504VPS(28V/36VDC)

