

IVB-213VPA

1-Channel Passive Video Balun



- Real-time transmission over UTP CAT5E/6 cable
- Passive, no need for power supply
- Audio distance up to 984ft (300m) via UTP Cat5e/6
- Built-in solid state TVS (Transient Voltage Suppressor) for surge protection
- Wave Filter Design, Anti-Static Design
- 60 dB crosstalk and noise immunity

Technical Specification

Model

IVB-213VPA

Video Transmission Properties

Coaxial Video Connector	BNC-Male
Connection	RJ45
Operating Frequency	DC to 71MHz
Compatible Format	HD-AVS/TVI/AHD/CVBS
Resolution	720P/1080P/4MP/5MP/4K
Audio Transmission distance	Up to 984ft (300m) via UTP Cat5e/6

Impedance

BNC Male Impedance	75 ohms
UTP Cable Impedance	100 ohms
Attenuation	1.5 dB typ. Max

Protection

Surge Protection	renewable solid state surge protection
Video Input	2KV (common mode), 10/700us IEC61000-4-5/1955(GB/T 1726, 5-1999)
Video Output	2KV (different mode), 10/700us IEC61000-4-5/1955(GB/T 1726, 5-1999)

Physical Properties

Network Wiring	One Unshielded Twisted Pair (for each video signal) 24-16 AWG (0.5-1.31mm)
Category Type	UTP cat 5e/6
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 Input	12V/24V, DC/AC
Power transmission	12V/24V, DC/AC, via UTP cat5e/6, please refer to power distance chart on the next page
Housing	ABS engineering plastic (Black)
Weight	0.143 lb (64.9g)
Dimension(LxWxH)	2.3"x 1.14" x 0.80" (60.4x 29x 20.4mm)
Shell	ABS
Color	Black
Operating Temperature	-22°F~+158°F(-20° ~ 70° C)
Operating Humidity	0~95% (non-condensing)
Storage Temperature	-40°F~+176°F(-40° ~ 150° C)

Video Distance Chart

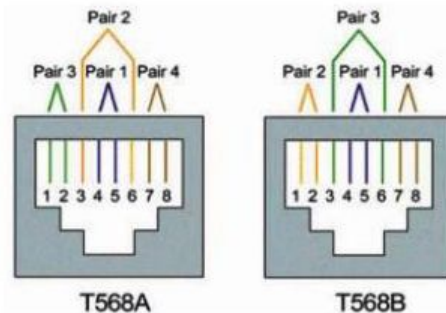
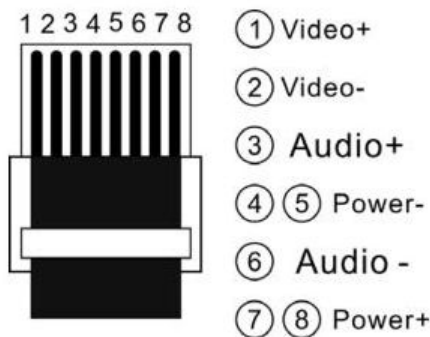
Camera Type	HD-TVI	HD-AVS	HD-AHD
720P camera	250m(820ft)	440m(1443ft)	320m(1049ft)
960P camera	Not tested	Not tested	320m(1049ft)
1080P camera	250m(820ft)	250m(820ft)	250m(820ft)
3MP camera	250m(820ft)	Not tested	250m(820ft)
4MP camera	180m(590ft)	200m(656ft)	200m(656ft)
5MP camera	180m(590ft)	Not tested	180m(590ft)
4K camera	130m(426ft)	200m(656ft)	150m(492ft)
CVBS camera	400m(1312ft)		

568A Wiring Specifications

Wire	Pin #	Configuration
Green White	1	Video (+)
Green	2	Video (-)
Orange White	3	Audio (+)
Blue	4	Power (-)
Blue White	5	Power (-)
Orange	6	Audio (-)
Brown White	7	Power (+)
Brown	8	Power (+)

568B Wiring Specifications

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Orange	2	Video (-)
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Brown White	7	Power (+)
Brown	8	Power (+)



Power Distance Chart (Over one UTP Cat 5e/6, one pair for video, 3 pairs for power.)

Camera Type	HD-AVS (720P)			
	12V DC	15V DC	18V DC	24V DC
100mA camera	500m	>450m	>475m	>450m
200mA camera	450m	>450m	>475m	>450m
300mA camera	315m	450m	>475m	>450m
400mA camera	230m	350m	475m	>450m
500mA camera	180m	270m	370m	>450m
600mA camera	140m	215m	295m	450m
800mA camera	110m	160m	215m	345m
1000mA camera	85m	125m	170m	265m

Camera Type	HD-AVS (1080P/4MP/4K)			
	12V DC	15V DC	18V DC	24V DC
100mA camera	>180m	>250m	>250m	>250m
200mA camera	>180m	>250m	>250m	>250m
300mA camera	150m	250m	>250m	>250m
400mA camera	115m	220m	>250m	>250m
500mA camera	90m	170m	250m	>250m
600mA camera	60m	140m	210m	>250m
800mA camera	40m	110m	160m	>250m
1000mA camera	30m	85m	130m	220m

Camera Type	AHD 720P/960P/1080P/3MP/4MP/5MP/4K			
	12V DC	15V DC	18V DC	24V DC
50mA camera	350m	>350m	>360m	>350m
100mA camera	250m	>350m	>360m	>350m
200mA camera	120m	350m	>360m	>350m
300mA camera	80m	200m	360m	>350m
400mA camera	50m	160m	250m	>350m
500mA camera	40m	130m	200m	>350m
600mA camera	30m	100m	160m	350m
800mA camera	<30m	80m	125m	240m
1000mA camera	<30m	55m	100m	195m

Camera Type	HD-TVI 720P/1080P/3MP/5MP/4K			
	12V DC	15V DC	18V DC	24V DC
100mA camera	>270m	>270m	>270m	>270m
200mA camera	150m	270m	>270m	>270m
300mA camera	100m	220m	>270m	>270m
400mA camera	75m	180m	>270m	>270m
500mA camera	50m	130m	240m	>270m
600mA camera	40m	120m	200m	>270m
800mA camera	30m	90m	150m	260m
1000mA camera	20m	60m	128m	220m

Application

