

### Single channel HD Video & Power Transmitter & Receiver

#### Features

- Real-time transmission over UTP cat5e/6
- NTSC, PAL & SECAM video format compatible
- Compatible with all HD-TVI, HD-CVI, AHD & CVBS analog cameras
- Colour video max up to 440m(1443ft) for HD-CVI 720P camera  
If you adjust saturation of DVR, max up to 470m(1541ft)  
Colour video max up to 230m(754ft) for HD-CVI 1080P camera
- Colour video max up to 190m(623ft) for HIKVISION TVI 720P camera  
Colour video max up to 190m(623ft) for HIKVISION TVI 1080P camera
- Colour video max up to 210m(688ft) for TVT HD-TVI 720P camera  
Colour video max up to 230m(754ft) for TVT HD-TVI 1080P camera
- Colour video max up to 320m(1049ft) for AHD 720P camera  
Colour video max up to 320m(1049ft) for AHD 960P camera  
Colour video max up to 250m(820ft) for AHD 1080P camera
- Colour video max up to 400m(1312ft) for CVBS camera
- Male BNC with extended 5.9inch(150mm)mini-coax pigtail
- RJ45 Jack for UTP cable
- Built-in TVS (Transient Voltage Suppressor) for surge protection
- Wave Filter Design, Anti-Static Design
- Lightning protection design Grade: III
- 60 dB crosstalk and noise immunity
- Exceptional interference rejection
- ABS engineering plastic housing



#### Overview

The HAY-HDPVB02 is video & power transmitter and receiver that allows the transmission of real-time CCTV HD video and power signal via cost-effective unshielded Twisted Paired (UTP) cable. Baseband (composite) signals of any type are supported.

The HAY-HDPVB02 is compatible with all HD-TVI, HD-CVI, AHD & CVBS analog cameras. Used in pairs, HAY-HDPVB02 eliminates costly and bulky coaxial cable.

The superior interference rejection and low emissions of the HAY-HDPVB02 allow video & power 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. The HAY-HDPVB02 is built-in surge suppressor to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.

#### Wire and Cable Recommendations

The HAY-HDPVB02 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

Model		HAY-HDPVB02		
Product Name		Single Channel HD Video & 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 42MHz		
	Max Distance	HD-TVI 720P: 190m	HD-CVI 720P: 440m	AHD 720P: 320m
		HD-TVI 1080P: 190m	HD-CVI 1080P: 230m	AHD 960P: 320m AHD 1080P: 250m
	Common-mode/Differential-mode rejection	15KHz to 42MHz 60 dB typ		
	Impedance	Coax, Male BNC 75Ω unbalanced UTP, RJ45 100Ω balanced		
Attenuation		1.5 dB typ Max		
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, via UTP cat5e/6. please refer to power distance chart above		
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	60g		
Environmental	Operating Temperature	-20° ~ 70° C		
	Relative Humidity	0~95% (non-condensing)		
	Storage Temperature	-40° ~ 150° C		