

**P-TRPV1 -set of passive HD video and power transmitters**



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EN



**1. Technical description.**

The P-TRPV1 is a set of passive devices used for HD video and power transmission using a twisted pair cable. The video signal is transmitted using one twisted pair, while the power is supplied using two twisted pair cables. The set of devices matches the impedance of the coaxial cable (75Ω) to the impedance of the symmetrical cable (100Ω). In order to achieve the best transmission quality and interference immunity, use UTP cable cat. 5 (or higher). Make sure the cable is properly prepared when making the connection. The RJ45 terminal crimp diagram is shown in Figure 1 presented below:

Caution! An improperly made cable may cause damage to the camera.

The P-TRPV1 modules are terminated with two types of connectors:

- a) the BNC plug (HD-CVI / HD-TVI / AHD video transmission),
- b) JACK 2,1 / 5,5 power socket (camera power supply).

The module is equipped with LED (located indoor the RJ45 connector). Red LED indicating the supply voltage.

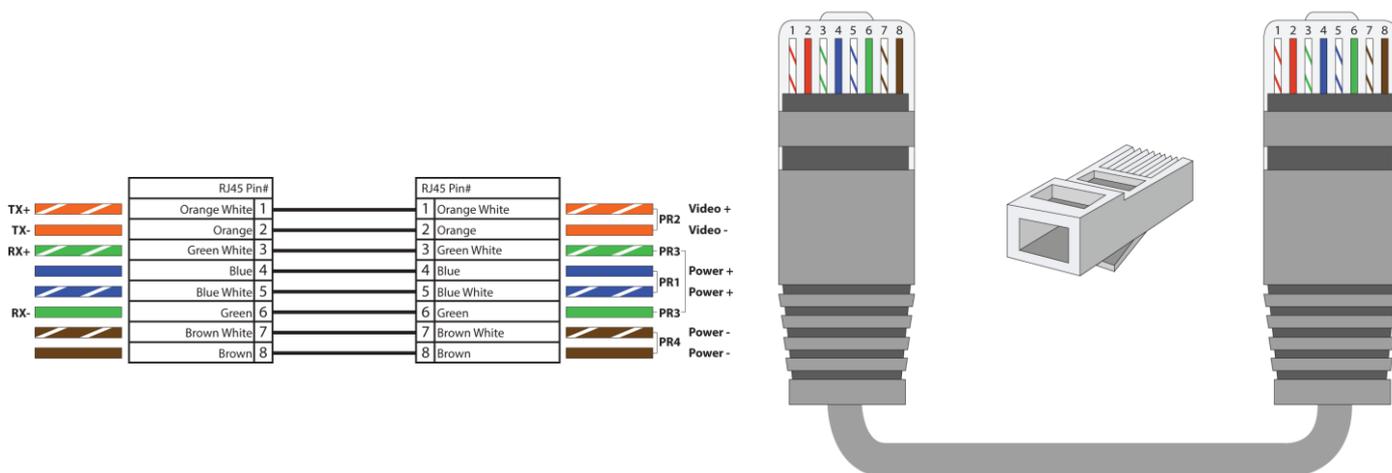


Fig.1. The RJ45-RJ45 (T-568B) wiring diagram.

The use of the P-TRPV1 set significantly reduces the CCTV system installation time. To install the cameras, simply crimp the RJ45 connectors (making a straight RJ45-RJ45 cable) and connect the appropriate video and power terminals.

## 2. Technical parameters.

The video signal	1,0 V <sub>p-p</sub> , 75Ω		
Video transmission range (UTP 5e or higher)	HDCVI	720p	450m
		1080p	250m
		3 / 4 / 8 Mpx	180m
	HD-TVI	720p	230m
		1080p	230m
		3 / 4 / 5 / 8 Mpx	200m
	AHD	720p	320m
1080p		200m	
3 / 4 / 5 / 8 Mpx		200m	
CVBS	960H	450m	
Video bandwidth	0 ... 50 MHz ( -3 dB )		
Impedance of the coaxial connector / connector type	75Ω / BNC plug (on the cable 100mm)		
Impedance of the unbalanced connector / connector type	100Ω / RJ45 socket		
Attenuation (loop-through)	-0,5dB / 5MHz		
CMRR	60dB / 5MHz		
The maximum permissible input voltage	12-15 V DC		
The maximum permissible current	1 A (for 12 V)		
Operation temperature	-10 °C ÷ 55 °C		
Storage temperature	- 40 °C ÷ 60 °C		
Permissible relative humidity	<95%		
Dimensions	22 × 10 × 40mm (with cable - 180mm length)		
Net / gross weight	0,075kg		
Declarations, warranty	CE, one year from the production date		

## 3. Examples of application set P- TRPV1.

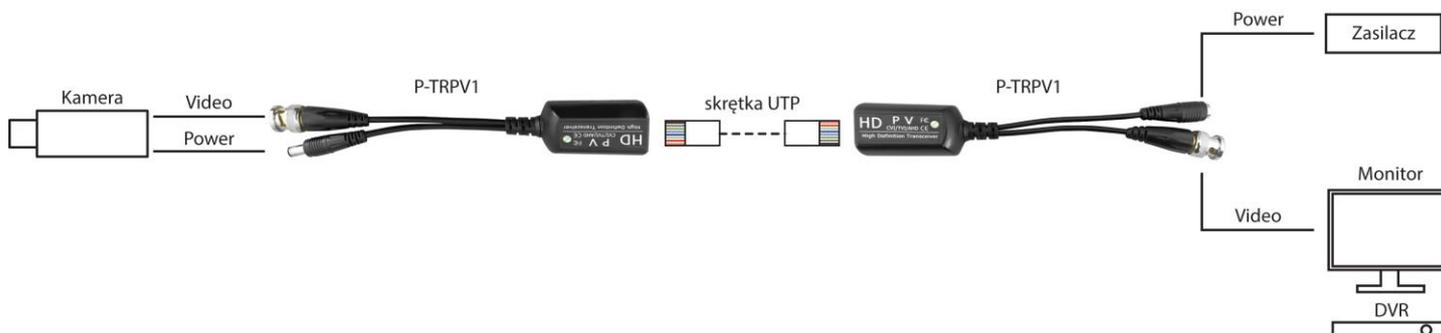


Fig. 2. Video and power transmission using twisted pair.

### WEEE LABEL

Waste electrical and electronic equipment must not be disposed of with normal household waste. According to the European Union WEEE Directive, waste electrical and electronic equipment should be disposed of separately from normal household waste.

### Pulsar sp. j.

Siedlec 150, 32-744 Łapczyca, Poland  
 Tel. (+48) 14-610-19-40, Fax. (+48) 14-610-19-50  
 e-mail: [biuro@pulsar.pl](mailto:biuro@pulsar.pl), [sales@pulsar.pl](mailto:sales@pulsar.pl)  
 http:// [www.pulsar.pl](http://www.pulsar.pl), [www.zasilacze.pl](http://www.zasilacze.pl)