Pulsar®

P-TRPV4

v1.0

P-TRPV4 passive HD video and power transmitter (4 channels)



Edition: 2 from 11.08.2017 Supercedes the edition: 1 from 01.06.2017

ΕN





1. Technical description.

The P-TRPV4 is a 4-channel passive HD video and power transmitter using twisted pair cable. Four UTP cables are used to supply power and for video transmission from four cameras. One twisted pair is used to transmit a video signal, while the power is transmitted using two twisted pair cables. The mentioned devices match the impedance of the coaxial cable (75Ω) to the impedance of the symmetrical cable (100Ω) . Usually, the module is mounted near the recorder. On the other hand, the P-TRPV120 1-channel passive transmitters are mounted at the cameras. The P-TRPV120 modules are not included (and must be purchased separately). An example diagram with both modules is shown in Figure 2.

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-TRPV4 has:

- a) four RJ45 jacks for connecting the UTP cable
- b) jacks 2,5 / 5,5 power socket (camera power supply)
- c) four sets of connectors terminated with the BNC plug (HD-CVI / HD-TVI / AHD video transmission).

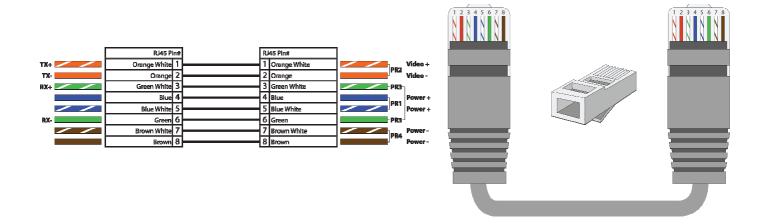


Fig.1. The RJ45-RJ45 (T-568B) wiring diagram.

2. Technical parameters.

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|---|---|
| The video signal | 1,0V _{p-p} , 75Ω |
| Video transmission range (UTP 5e or higher) | HD-CVI (720p) - 450m; HD-CVI (1080p)-250m |
| | HD-TVI (720p / 1080p) - 250m |
| | AHD (720p / 960p)-350m; AHD (1080p)-250m |
| 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 | 100Ω / RJ45 socket |
| type | 10027 HJ45 SUCKEL |
| Attenuation (loop-through) | -0,5dB / 5MHz |
| CMRR | 60dB / 5MHz |
| The maximum permissible input voltage | 12-15VDC |
| The maximum permissible current | 1A / channel ΣI=4A (for 12VDC) |
| Device DC power socket type: | JACK 2,5/5,5mm |
| DC power coupling connector: | DC plug 2.5/5.5mm / socket 2.1/5.5mm |
| Operation temperature | -10°C ÷ 55°C |
| Storage temperature | -40°C ÷ 60°C |
| Permissible relative humidity | <95% |
| Dimensions | 104 × 26 × 47mm (with cable - 180mm length) |
| Net / gross weight | 0,22kg |
| Declarations, warranty | CE, one year from the production date |
| | |

REMARK:

DC power plug 2.5/5.5 / socket 2.1/5.5 connector is included

3. Sample applications of the P- TRPV4.

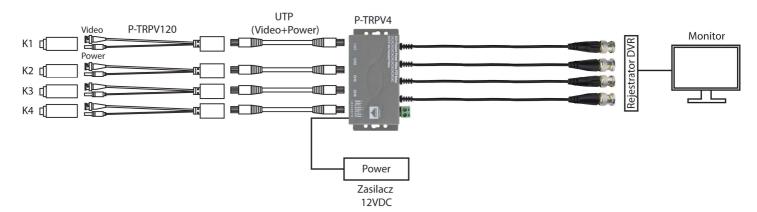


Fig. 2. Video and power transmission for 4 cameras using one 4-channel transmitter and four 1-channel transmitters.

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.