

TWISTED PAIR TRANSMISSION SYSTEM – Passive Series

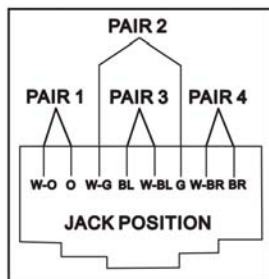
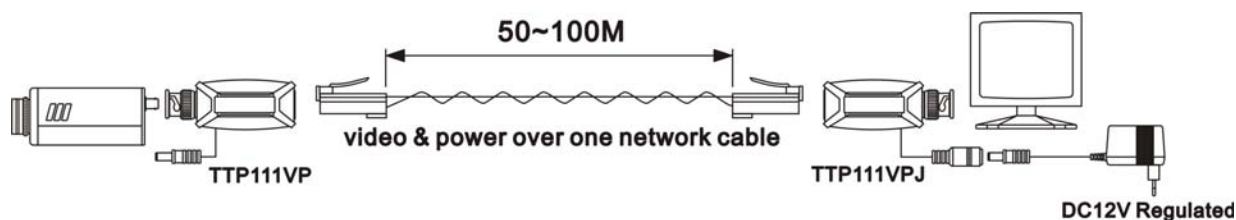
ITEM NO.: TTP111VPK (TTP111VP+TTP111VPJ) Video & Power Transceiver



Features:

- Send Video & power over one CAT-5E UTP cable, add you own power supply.
- Send color video signals up to 300 meters; B/W to 600 meters.
- Power cable could be one, two, or three pairs option based on camera power consumption and transmission range.
- Eliminate coaxial & power cable.
- Use with TTP111VPJ, transmit video and power, data over one CAT5 cable.
- Fast, easy installation, saving time and money.
- Substantial saving on the cost of the cable itself.
- Refer the page 2. "Voltage Drop According to Cable Length" for power transmission range.

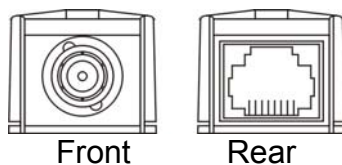
Installation View:



RJ45 pin connect

- Pair 1 : 1. Orange-white & 2. Orange
- Pair 2 : 3. Green -white – & 6. Green + → Power
- Pair 3 : 5. Blue-white – & 4. Blue + → Power
- Pair 4 : 7. Brown-white & 8. Brown → Video

Panel View:



Specification:

| ITEM NO. | TTP111VP | TTP111VPJ |
|-----------------|---|-----------|
| VIDEO INPUT | BNC x 1 (75 Ω · 1 Vp-p) | |
| INTERFACE | RJ45 x 1 | |
| POWER | Pass Through | |
| TEMPERATURE | Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95% | |
| RECOMMEND CABLE | CAT.5 UTP (24 AWG) | |
| DIMENSIONS mm | 69 x 25 x 20.7 + 140mm power cord | |
| WEIGHT g | 36 | 37 |



Rev.B

Voltage Drop According to Cable Length (24AWG):

| Power Range | Power Supply Voltage 12 Volts DC | | | | | | | | |
|--------------------------|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 50M | | | 100M | | | 300M | | |
| Camera Power Consumption | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR |
| 50mA | 11.4 | 11.7 | 11.8 | 10.8 | 11.3 | 11.6 | 9.6 | 10.6 | 11 |
| 100mA | 11 | 11.5 | 11.5 | 9.7 | 10.8 | 11.2 | | 9.2 | 10.1 |
| 150mA | 10.5 | 11.2 | 11.3 | 9 | 10.4 | 10.9 | | | 9.3 |
| 200mA | | 11 | 11.2 | | 9.9 | 10.6 | | | |
| 250mA | | 10.7 | 11 | | 9.4 | 10.2 | | | |
| 300mA | | 10.5 | 10.8 | | | 9.9 | | | |
| 350mA | | 10.3 | 10.6 | | | 9.7 | | | |
| 400mA | | 10 | 10.4 | | | 9.4 | | | |
| 450mA | | 9.6 | 10.2 | | | | | | |
| 500mA | | 9.2 | 9.8 | | | | | | |

| Power Range | Power Supply Voltage 15 Volts DC | | | | | | | | | | | |
|--------------------------|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 50M | | | 100M | | | 300M | | | 600M | | |
| Camera Power Consumption | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR |
| 50mA | 14.4 | 14.7 | 14.8 | 13.8 | 14.3 | 14.6 | 11.9 | 13.6 | 14 | X | 12 | 12.9 |
| 100mA | 14 | 14.5 | 14.5 | 12.7 | 13.8 | 14.2 | X | 12.2 | 13.1 | X | X | 11.1 |
| 150mA | 13.5 | 14.2 | 14.3 | 12 | 13.4 | 13.9 | X | 11.1 | 12.3 | X | X | X |
| 200mA | 12.6 | 14 | 14.2 | 11.3 | 12.9 | 13.6 | X | X | 11.5 | X | X | X |
| 250mA | 12.1 | 13.7 | 14 | 10.3 | 12.4 | 13.2 | X | X | X | X | X | X |
| 300mA | 11.8 | 13.5 | 13.8 | X | 12 | 12.9 | X | X | X | X | X | X |
| 350mA | 11.3 | 13.3 | 13.7 | X | 11.7 | 12.7 | X | X | X | X | X | X |
| 400mA | 10.8 | 13 | 13.5 | X | 11.2 | 12.4 | X | X | X | X | X | X |
| 450mA | X | 12.7 | 13.3 | X | 10.7 | 12.1 | X | X | X | X | X | X |
| 500mA | X | 12.4 | 13.1 | X | X | 11.6 | X | X | X | X | X | X |

| Power Range | Power Supply Voltage 24 Volts DC | | | | | | | | | | | |
|--------------------------|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 50M | | | 100M | | | 300M | | | 600M | | |
| Camera Power Consumption | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR | 1 PAIR | 2 PAIR | 3 PAIR |
| 50mA | 23.8 | 23.8 | 23.8 | 23 | 23.5 | 23.6 | 21 | 22.4 | 23 | 18.1 | 21.2 | 22.1 |
| 100mA | 23.6 | 23.4 | 23.5 | 22.4 | 23.1 | 23.3 | 18.7 | 21.1 | 22.2 | 12.9 | 18.7 | 20.4 |
| 150mA | 22.6 | 23.2 | 23.3 | 21.3 | 22.6 | 22.9 | 16.2 | 20 | 21.3 | X | 16.1 | 18.9 |
| 200mA | 22.1 | 22.9 | 23.1 | 20.3 | 22 | 22.5 | 13.7 | 18.1 | 20.5 | X | 13.5 | 17.1 |
| 250mA | 21.6 | 22.6 | 22.9 | 19.4 | 21.6 | 22.2 | 10.9 | 17.4 | 19.6 | X | 11.1 | 15.4 |
| 300mA | 21.1 | 22.4 | 22.7 | 18.4 | 21.2 | 21.9 | X | 16.1 | 18.8 | X | X | 13.8 |
| 350mA | 20.6 | 22.1 | 22.5 | 17.5 | 20.6 | 21.6 | X | 15 | 18.1 | X | X | 12.2 |
| 400mA | 20.2 | 21.8 | 22.3 | 16.5 | 20.1 | 21.2 | X | 13.9 | 17.3 | X | X | 10.7 |
| 450mA | 19.7 | 21.6 | 22.1 | 15.5 | 19.6 | 20.9 | X | 12.7 | 16.6 | X | X | X |
| 500mA | 19.1 | 21.3 | 21.9 | 14.5 | 19.1 | 20.5 | X | 11.3 | 15.4 | X | X | X |

AC24V Power Distance Chart over UTP cable:

| CAT5 Cable (24AWG) | Range |
|--------------------|------------|
| 2 PAIRS/AC24V | |
| 100 mA | 300 Meters |
| 300mA | 100 Meters |
| 1 Amp | 30 Meters |