



# FORESIGHT™

SMART CCTV CABLING SYSTEM SOLUTION



RoHS

Vol. 12

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Smart twisted pair transmission products are designed for CCTV signal transmission over unshielded twisted pair wire (CAT5 network cable).

## Passive Series

Passive Video Transceiver ( no power required), transmission range color 400 meters, B/W 600 meters via CAT5 UTP Cable.

### TTP111V

Video Transceiver BNC Male To RJ-45 Female

- BNC male to RJ45 female.



### TTP111VT

Video Transceiver BNC Male To Terminal Block

- BNC male to 2 pin terminal block.

\* TTP111VF Video Transceiver F Male To Terminal Block.



### TTP111VE

Mini Video Transceiver

- BNC male to screw terminal for easy connection.
- Compact size, could mount multiple units behind multiplexer, Quad, DVR...etc.
- **Blister Card Package: 10pcs in one blister card.**



### TTP111VEL

Mini Video Transceiver with 10cm mini coax cable

- Identical to TTP111VE, but with 10cm mini coax cable for easy connection.



### TTP111VTS

Video Transceiver BNC Male To Terminal Block

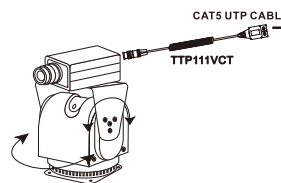
- Identical to TTP111VT, but built in surge protection.



### TTP111VCT

Video Transceiver With 18cm Retractable Cord

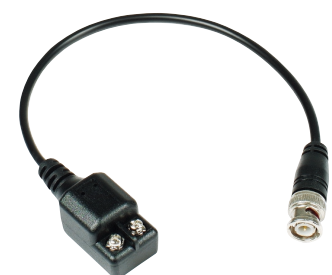
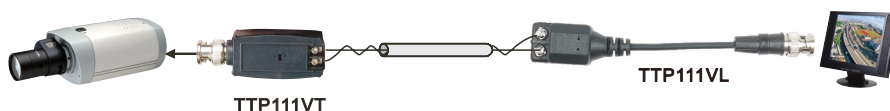
- BNC male to screw terminals with 18cm Retractable Cord.
- Weatherproof IP65.
- Perfect for camera with pan-tilt turning device.



### TTP111VL

Video Transceiver With 25cm Mini Coax Cable

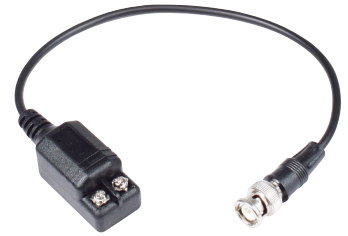
- BNC male to terminal block.
- Weatherproof IP65.
- **Compact size and pigtail could be mounted multi units behind multiplexer, quad, DVR.**



## TTP111VLH

### Video Transceiver With Extra Interference Rejection

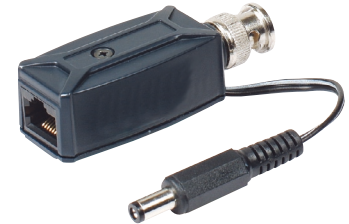
- BNC male to terminal block with 25cm mini coax cable.
- Weatherproof IP65.
- **Perfect work with DVR to immunity DVR interference.**
- Built in a highly balanced mode of video transmission, which is immune to interference from these, and other sources of noise: Data signals, other video signals, nearby power, ringing telephones, fluorescent lights, transformers, and more...



## TTP111VP

### Video Transceiver BNC Male To RJ45 Female With Power Cord

- BNC male + DC plug to RJ45 female.
- **Use with TTP111VPJ, transmit video & power over one CAT5 cable. (range 50 meters).**
- **Use with TDP14VP for power transmission 4 cameras from remote site.**



## TTP111VP3

### Video & Power Transceiver (3 Pairs Version)

- Identical to TTP111VP, but remote power go through via "3 pairs" instead of "2 pairs" for longer range.
- For AC24V camera use, the power sources from TPP016VPD hub for professional CCTV Industry Installation. (Please Ref. to page 7 )



## TTP111VPC

### Video & Power Transceiver Built in AC to DC12V Power Converter

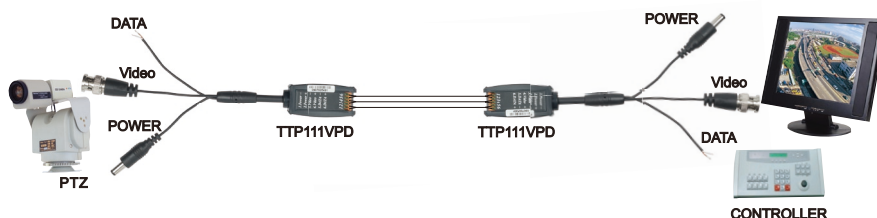
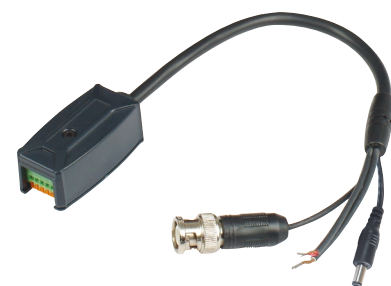
- Video (one pair) and remote power (2 or 3 pairs) transmission over one 4pairs CAT5 cable.
- **Built in AC to DC12V regulated power converter, 1000mA max.**
- **Built in switch to set unit for "2 pair power through" or "3 pairs power through" mode for variety range.**
- For DC12V camera use, the power sources from TPP016VPD hub(AC24V) for professional CCTV Industry Installation. (Please Ref. to page 7)



## TTP111VPD

### Video, Power, Data Transceiver (Terminal Termination)

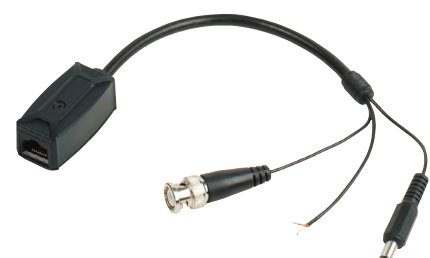
- Male BNC with DC Plug+2 pin pigtail to 6 "push pin" terminal.
- Push pin terminal for easy cable connection.
- **Video , low voltage camera power, data (RS485) transmission over one CAT5 cable.**



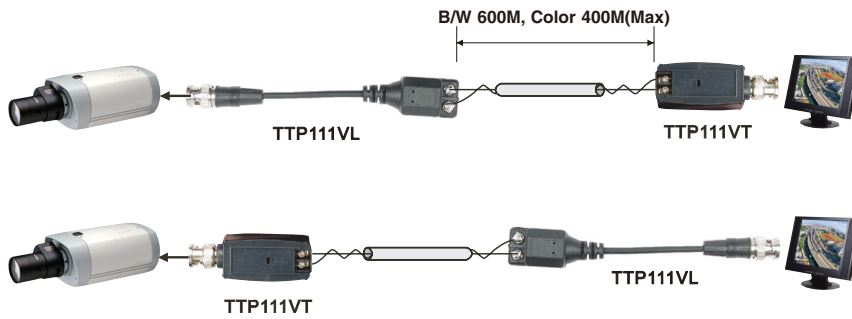
## TTP111VPD-RJ45

### Video, Power, Data Transceiver (RJ45 Termination)

- Identical to TTP111VPD, but with RJ45 connector instead of terminal.
- Video, low voltage camera power, data (RS485) transmission over one CAT5 cable.
- **Use with TDP016+ TPP016-RJ45 for 16 channel video, power, data for a neat and professional CAT5 cabling solution(Ref. to page 11).**



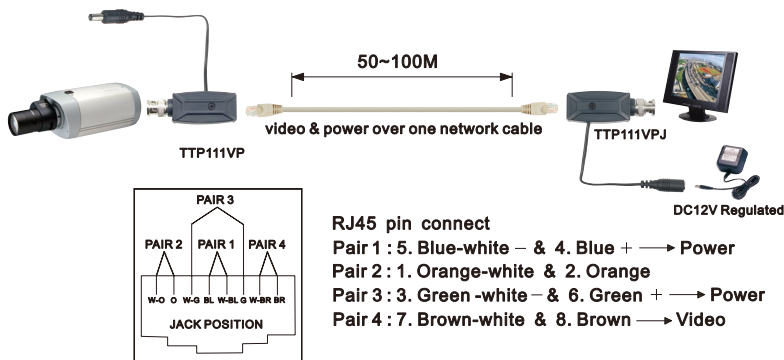
## TTP111VK (TTP111VT+TTP111VL) DIY KIT



Twisted Pair Transmission

## TTP111VPK (TTP111VP+TTP111VPJ) DIY KIT

- Video & Power Transmission Over One CAT5 Cable



## TTP111VPK-T (TTP111VP-T+TTP111VPJ-T) Professional KIT

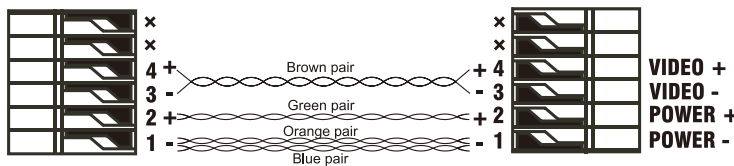
- Send video & power over one CAT5 UTP cable.
- 6 pin terminal connector for easy connections.
- Power cable could be one, two, or three pairs option based on camera power consumption and transmission range.

### TTP111VP-T

- BNC male + power DC plug to 6 pin terminal

### TTP111VPJ-T

- BNC male + power DC jack to 6 pin terminal

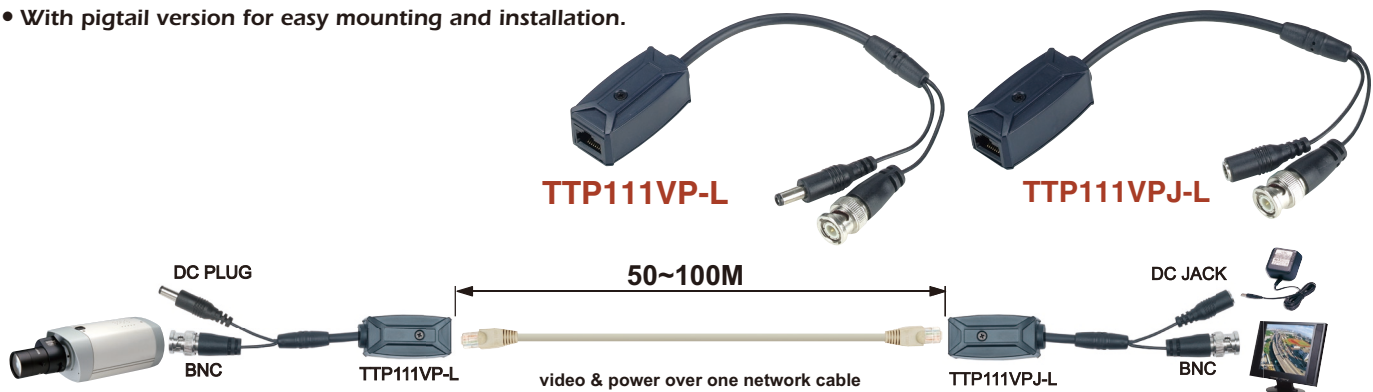


Note: The Blue pair can be split and used to supplement the conductors on terminals 1 to extend the power transmission distance.



## TTP111VP-LK (TTP111VP-L+TTP111VPJ-L) with Pigtail version KIT

- Video & Power Transmission over one CAT5 cable
- With pigtail version for easy mounting and installation.



## TTP111VPD-RJ45-K (TTP111VPD-RJ45+TTP111VPDJ-RJ45) DIY KIT

- Video, power, data combiner.
- Video, low voltage camera power, data (RS485) transmission over one CAT5 UTP cable.



## TTP414V

### 4 Channel Video Transceiver

- 4 x BNC female to 1 x RJ45 female + 8 pin terminal block.
- Four passive transceivers in one product.
- Choice of RJ45 or push pin terminal inputs/outputs.



## TTP414VD

### 4 Channel Video Transceiver With Data

- 4 x BNC female + 1 x RJ45 female + 1x terminal block ( for RS485 data transmission).
- Using 4 pairs CAT5 cable to transmit/receive 3 sets of video signals plus 1 data signal or transmit/receive 4 sets of video signals only.



## TTP414VH

### 4 Channel Video Transceiver With Extra Interference Rejection

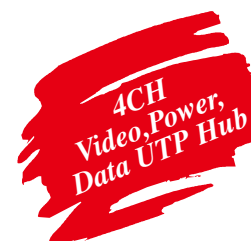
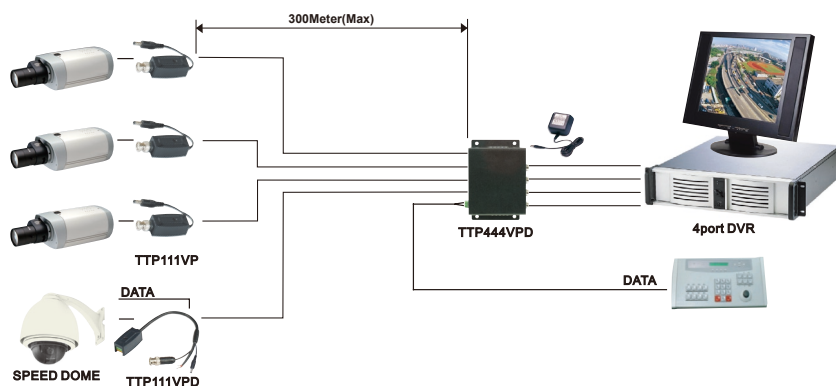
- 4 BNC female to 1 x RJ45 female.
- Perfect work with DVR to immunity DVR interference.
- Built in a highly balanced mode of video transmission, which is immune to interference from these, and other sources of noise: Data signals, other video signals, nearby power, ringing telephones, fluorescent lights, transformers, and more...



## TTP444VPD

### 4 Channel Video, Power, Data Transceiver

- 4 x BNC female + DC power to 4 x RJ45 female + 2 pin terminal for data.
- Video, camera power, data (RS485) transmission over one CAT 5 cable.
- Built in PTC fuse for short protection.
- Use with TTP111VPD, transmit 4 channels video, power, data over four CAT5 cable.



# Twisted Pair Transmission

## Active Series

Active Video Transceiver (power required), transmission range color 1500 meters, B/W 2400 meters via CAT5 UTP Cable.

### TTA111AV

Active Video & Audio & Data Twisted Pair Transmission

- Transmit video, audio and data signal (RS422, RS485).
- Three position range switch for gain select on transmitter.
- Five position distance range switch on receiver, brightness adjustment, two video output.
- Built in transient protection and ground lifting.

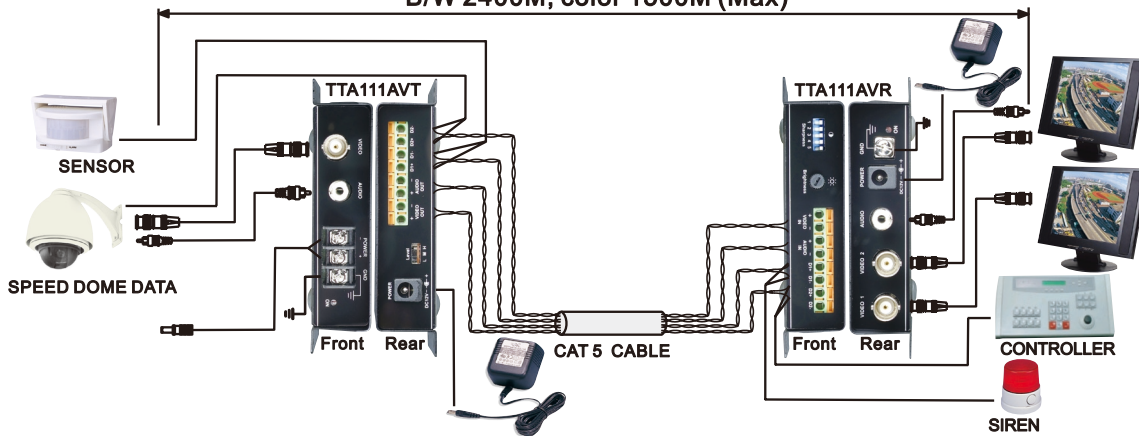


TTA111AVT Transmitter



TTA111AVR Receiver

B/W 2400M, color 1500M (Max)



### TTA111V

Active Video Twisted Pair Transmission

- Five position range switch for color gain on transmitter, brightness adjustment.
- Five position distance range switch on receiver, brightness adjustment.
- Built in transient protection and ground lifting.
- System is integrated with alarm sensor (PIR, Magnetic, etc...) or RS485/422 data.



TTA111VT Transmitter



TTA111VR Receiver

### TTA111VH

Active Receiver with Extra Interference Rejection

- Built in a highly balanced mode of video transmission for extra interference immunity.
- HF, MF, LF compensation for color gain and adjustable brightness & contrast for cleaner, sharper looking picture.
- Built in input impedance, balance, liner gain adjustment.
- Built in surge protection.
- Perfect to maintain good quality picture for long-range transmission with DVR.
- Using two sets of TTA111VT+TTA111VH for series connection, range up to 2.4Km(Color), 3Km(B/W).



# Twisted Pair Transmission

## TTA414VR

### 4 Channel Active Receiver

- Built in 4 port active receivers.
- Others identical to TTA111VR.
- Built in a highly balanced mode of video transmission for extra interference immunity.



### OPTION:

To protect high value camera and CCTV image processor/monitoring equipment destroyed from high voltage surges from nearby lightning strikes, the long-range twisted pair cable go through outdoors. To add **surge protection** SP003-SP006 device on the back of camera and front of CCTV image processor/monitoring equipments. Less cost to save high value CCTV equipments.

## 1U Panel Series

### TPP016

#### 16 Port Passive Video Transceiver Hub In 1U Rack Mounting Panel

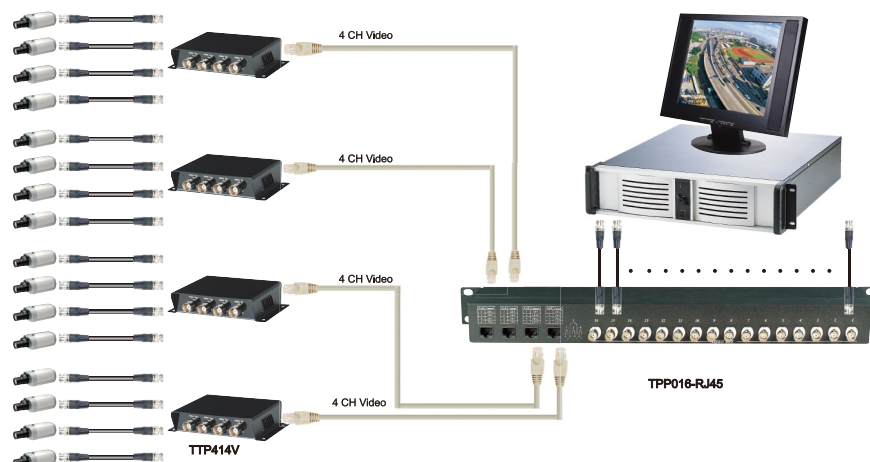
- Built in 16 port passive transceivers in 1U 19" rack mounting panel.
- As a rack mounting passive transmitter hub, use with active receiver at distance up to 1000 meters.
- Passive, no power required.
- Built in a highly balanced mode of video transmission for extra interference immunity.



### TPP016-RJ45

#### 16 Port Passive Video Transceiver Hub In 1U Rack Mounting Panel

- Identical to TPP016, but using RJ45 termination instead of terminal block.
- 16 BNC connector for video output, 4 x RJ45 connector for 16 channel video input.
- Use with TTP414V or use with TTP111VPD-RJ45+TDP016 for a neat and professional CAT5 cabling solution.



# Twisted Pair Transmission

Twisted Pair  
Transmission

## TPP016D

### 16 Port Passive Video & Data Transceiver Hub In 1U Rack Mounting Panel

- Identical to TPP016, but with data transmission.
- 1 x RS485 data input to 16 x RS485 output.



## TPP016GB

### 16 Port Passive Video Transceiver Hub Built in Ground Loop Isolator

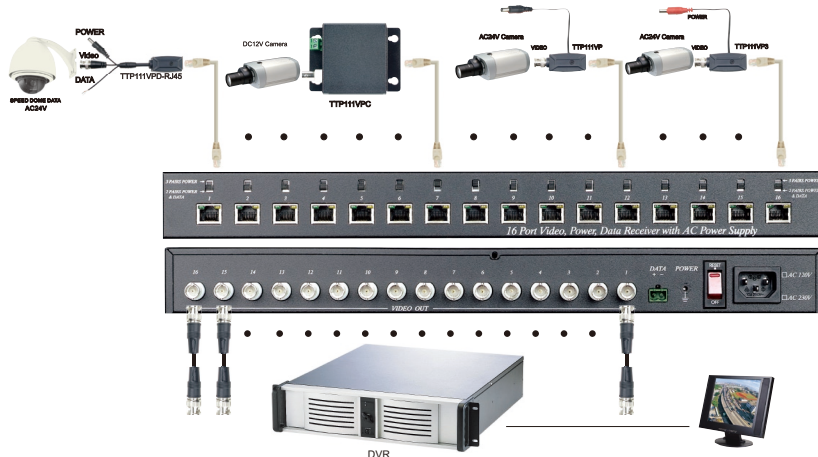
- Identical to TPP016.
- Built in hi performance ground loop isolator (GL001H) at each channel. (Refer to Page 27)
- Low video loss, Bandwidth: 20Hz -11MHz, +0/-3dB.
- Prevents video-signal distortion caused by video ground loops.
- Eliminates picture tearing, cross talk and rolling.
- Prevents power cables laid by others interfering with the CCTV system.



## TPP016VPD

### 16 Port Passive Video, Power, Data UTP Hub with AC Power Supply in 1U Rack Mounting Panel

- TPP016VPD UTP hub integrate and send video and power, data over a single 4 pairs CAT5 cable up to 300 meters.
- Built in switch at each port to set unit for "2 pair power + 1 pair data" mode or "3 pairs power" mode.
- Use with video power transceiver TTP111VP3 (AC24V camera), TTP111VPC (DC12V camera) at camera side, to send video and power only.
- Use with TTP111VPD-RJ45 video, power, data combiner at the camera side, to send video, power and data.
- 8 Amp AC24V power, each port output current up to 1.1Amp for camera, max up to 8 Amp.
- Built in "no fuse breaker" to avoid current overload.
- Built in PTC (positive temperature coefficient) for short protection and auto rework on each port.



# Twisted Pair Transmission

## TPA008

### 8 Port Active Receiver Hub In 1U Rack Mounting Panel

- Built in 8 port TTA111VR active receivers in 1U 19" rack mounting panel.
- Built in a highly balanced mode of video transmission for extra interference immunity.
- Built in transient protection and ground lifting.



## TPA008H

### 8 Port Active Receiver Distribution Amplifier In 1U Rack Mounting Panel

- Identical to TPA008.
- 8 inputs (UTP screw-terminal input) to 16 outputs (BNC).
- Built in surge protection, perfect to work with DVR.



## TPA016

### 16 Port Active Receiver Hub In 1U Rack Mounting Panel

- Built in 16 port TTA111VR active receivers in 1U 19" rack mounting panel.
- Built in a highly balanced mode of video transmission for extra interference immunity.
- Built in transient protection and ground lifting.



## TPA016H

### 16 Port Active Receiver Distribution Amplifier In 1U Rack Mounting Panel

- Identical to TPA016.
- 16 inputs (UTP screw-terminal input) to 32 outputs (BNC).
- Built in surge protection, perfect to work with DVR.

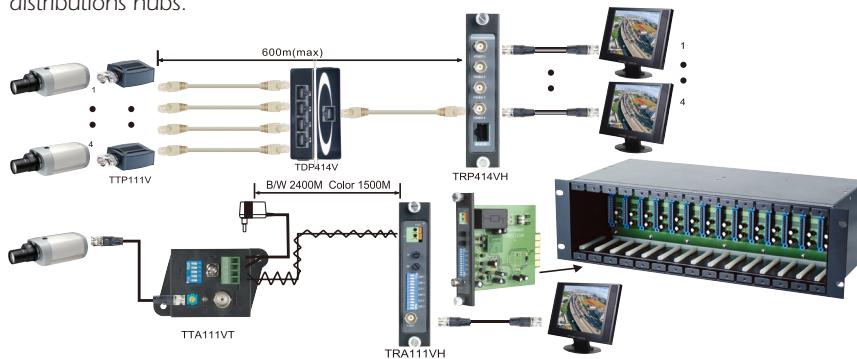


## 19" Rack Card Series

### TRN012

#### 3U 19" Rack Mounting Cabinet Built In Power Supply

- Standard 19" 3U rack mounting cabinet **built in 3Amp switching power supply**.
- 15 insert lots for TRP414VH, TRA111VH receiver rack card.
- No cooling fans required.
- Ground connecting for protection monitoring equipment.
- Ideal for large security monitoring stations or video (audio) distributions hubs.



### TRP414VH

#### 19" Rack Card 4 Channel Passive Receiver

- 1 RJ45 input and 4 video BNC outputs.
- **Built in a highly balanced mode of video transmission for extra interference immunity, perfect work with DVR to immunity DVR interference.**
- Use with TRN012, to insert up to 15 pieces TRP414VH for 60 channel passive video transmission.



### TRA111VH

#### 19" Rack Card 1 Channel Active Receiver

- Built in a highly balanced mode of video transmission for extra interference immunity.
- HF, MF, LF compensation for color gain and adjustable brightness & contrast for cleaner, sharper looking picture.
- **Built in surge protection.**
- **Perfect to maintain good quality picture for long-range transmission with DVR.**
- Use with TRN012, to insert up to 15 pieces TRA111VH for 15 channel active video receive.



## Rack Mounting Panel

### TPN009

#### 19" 2U Rack Mounting Panel

- Standard 19-inch (482mm) wide, 3.5-inch (88mm) 2U high.
- Support up to 9 pieces of TTA111VR or CD102.
- This heavy-gauge panel is designed to withstand the mechanical load of multiple cables.



Application:



CD102 or TTA111VR

### TPN012-C

#### 19" Universal Rack Mounting Panel with 4 Pieces Holder

- 4 pieces holder for plastic case (to fit TTP414VD, TTP414VH, TTA111VH, CD102A, CD104, CA404, CA101VH, CA101A)
- Standard 19-inch (482mm) wide, could support up to 12 pieces holder.

### TPN012C

#### 4 Pieces Holder In One Bag For TPN012-C

### TPN012-T

#### 19" Universal Rack Mounting Panel with 4 Pieces Holder

- 4 pieces holder for Metal case (to fit, TTP111AV, TTP414V, TTP444V, TTA111AVR)
- Standard 19-inch (482mm) wide, could support up to 12 pieces holder.

### TPN012T

#### 4 Pieces Holder In One Bag For TPN012-T



Application: TTA111VH, CA404, CD104....

TTP414V, TTP111AV, TTA111AVR....

# Twisted Pair Transmission

## Video & High Power UTP Cabling Solution

### TTP111VPDC

Video, Power, Data Transmitter Built in DC12V Power regulator

- To send video and remote power over one 4pairs CAT5 cable.
- Built in RS485 terminal for data transmission.
- Power output: DC12V regulated 25W (Max.)
- Transmission distance up to 300 meters.
- Built in LED indication.
- Built in ESD and surge protection.
- For DC12V camera use, the power sources from remote UTP receiver:  
TTA111VPDR, TTA414VPDR, TPA016VPDR for professional CCTV Industry Installation.



### TTA111VPDR

1 Port Video, Power, Data Receiver With DC High Power Supply

- Use with TTP111VPDC video, power, data transmitter at camera side to send video and power, data over one UTP cable.
- RJ45 termination for easy installation.
- Provide high power to remote camera DC12V/25W (Max.)
- Power input: AC100-AC240V.
- Transmission range up to 300 meters.
- Built in LED indication.
- Built in ESD and surge protection.



### TTA414VPDR

4 Port Video, Power, Data Receiver With DC High Power Supply

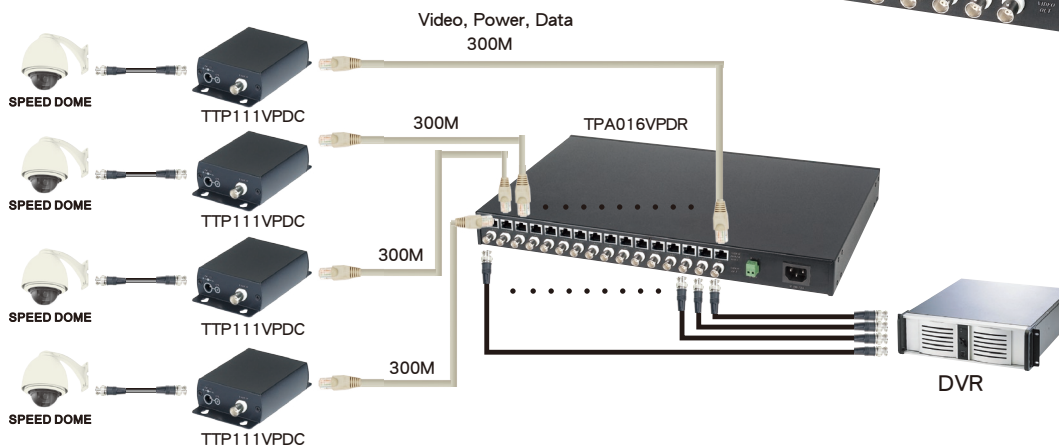
- Identical to TTA111VPDR, but with 4 Port Video, Power, Data Receiver Hub
- Provide high power to 4 remote cameras DC12V/100W (Max.)



### TPA016VPDR

16 Port Video, Power, Data Receiver Hub With DC High Power Supply in 1U Rack Mounting Panel

- Identical to TTA111VPDR, but with 16 Port Video, Power, Data Receiver Hub.
- Provide high power to 16 remote cameras DC12V/400W (Max.)

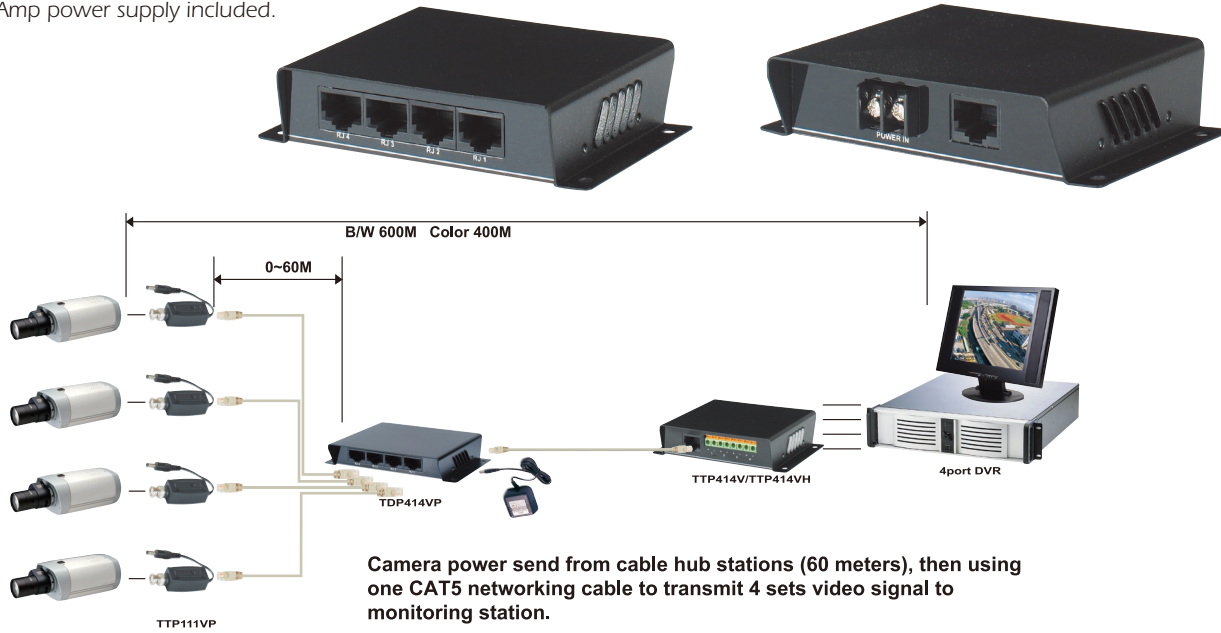


## UTP Cable Hub

### TDP414VP

#### 4 RJ45 Female to 1 RJ45 Female Cable Hub With Power

- Built in terminal block for DC in.
- **Built in PTC (positive temperature coefficient) fuse 1.1Amp for short protection.**
- Use with TTP111VP to transmit power for camera use from remote site 50 meters.
- 1.2Amp power supply included.



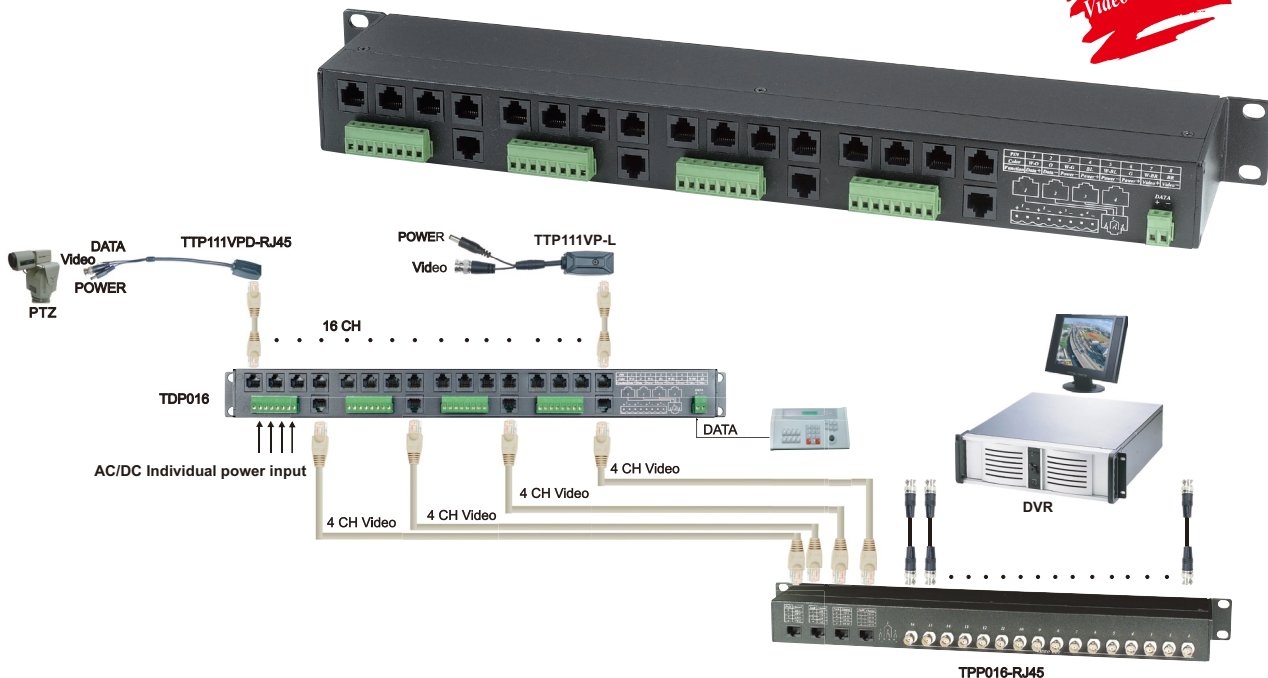
**Option Model: TDP414VP-N** 4 RJ45 Female to 1 RJ45 Female Cable Hub package without power supply.

### TDP016

#### 16 Port Cable Integrator (Video, Power, Data) In 1U Rack Mounting Panel

- 16 cameras cable termination panel, use for integrating power, video and data signals onto 4 x RJ45 4 pairs CAT5 UTP cable.
- **Built in surge protection on data.**
- Individual power input, could send different power voltage based on camera power consumption and transmission range.
- Use with TTP111VPD-RJ45 video, power, data transceiver at the camera side.
- Use any third-party power supply to power cameras via UTP cable.
- Use with TPP016-RJ45 as video transceiver receiver at control room.

*Video+Power+Data*



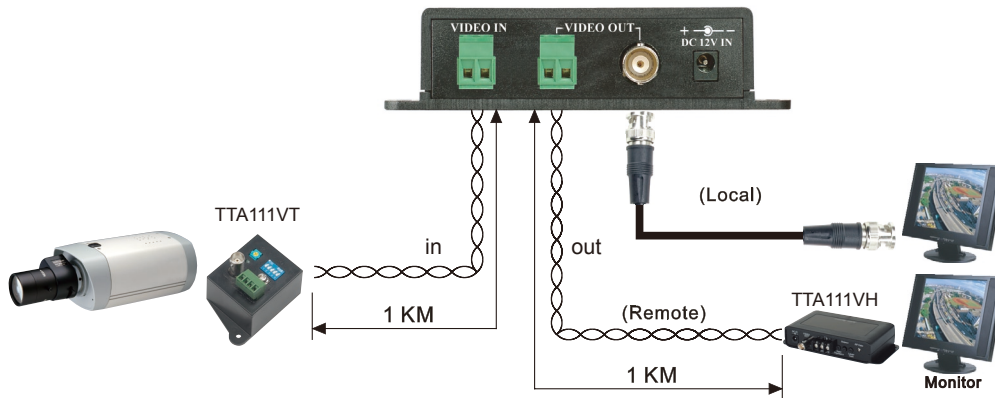
# Twisted Pair Transmission

## UTP Video Distributor

### TDA102

#### Twisted Pair 1 Input to 2 Output Video Distributor

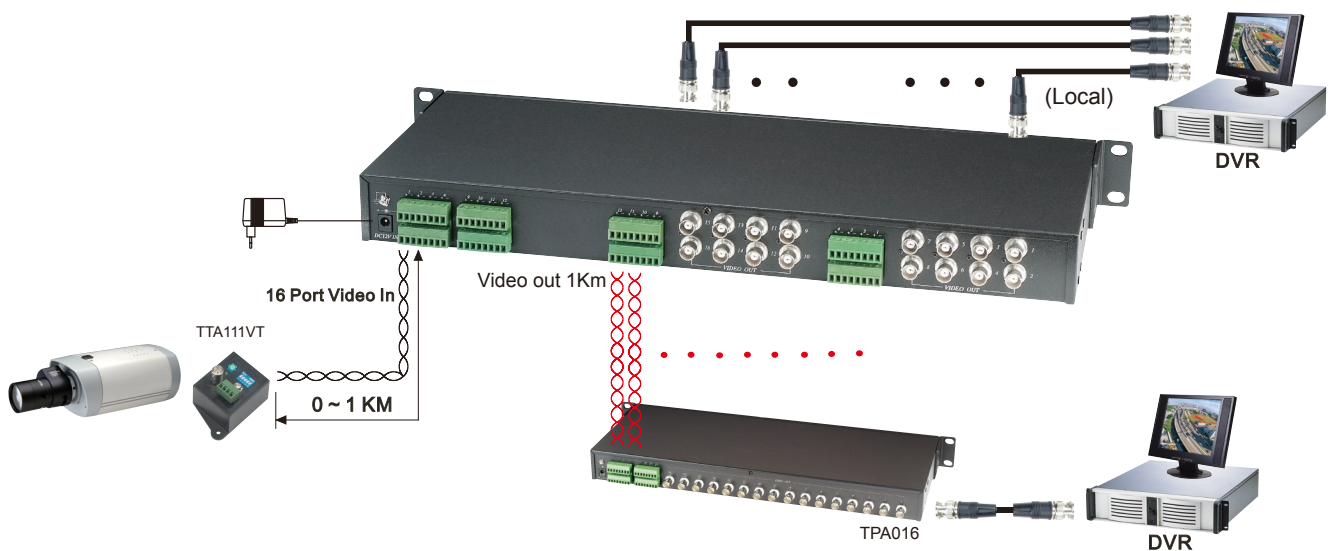
- Video input: 2 pin terminal block.
- Built in twisted pair active receiver (TTA111VR).
- As a UTP repeater, to repeat UTP signal up to 1Km.
- Dual output: 1 BNC output for local, plus 1 UTP output for remote side.



### TDA1632

#### Twisted Pair 16 Input to 32 Output Video Distributor

- Video input: 16 x 2 pin terminal block.
- Built in twisted pair active receiver (TTA111VR).
- Dual output : 16 BNC output for local, plus 16 UTP output for remote.

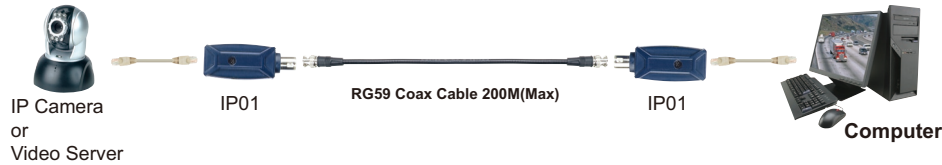


# IP Cabling Transmission

## IP01

### IP Extender over Coax

- Send IP camera signal over existing coaxial cable.
- Passive, no power required.
- Exceeds 802.3 10BaseT (10Mbps), isolating the receiver from the transmitted signal.
- Transmission up to 200 meters (Max.)



## IP01H

### Ethernet Switch with 4Port 10Base-T+ 1Port 10/100Base-T

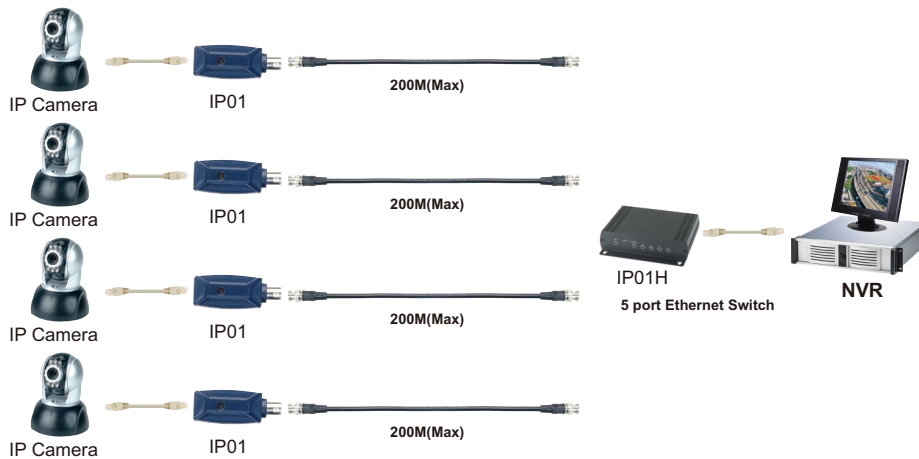
- 5 Port Ethernet Switch with 4 port BNC and 1 port RJ45.
- RJ45 terminal support 10/100Mbps auto detect function.
- BNC terminal support 10Mbps, must work with IP01.
- LED indication: Link/Active, Power.
- Complies with standard IEEE802.3 and IEEE802.3u.
- Auto MDI/MDI-X auto cross at RJ45 terminal.



## IP01K

### 4 x IP01 IP extender + 1 x IP01H 5 Port Ethernet Switch Kit Package

- Package include: 4 pieces x IP01, 1 pcs x IP01H with power adapter.



## IP02

### Active IP Extender over Coax

- Send and extend IP camera signal or any TCP/IP devices over existing coaxial cable.
- Active type, including transmitter and receiver.
- Plug and play for easy connection
- Long range transmission up to 1800 meters (Max.)



# IP Cabling Transmission

## IP03

### Active IP Extender over CAT5

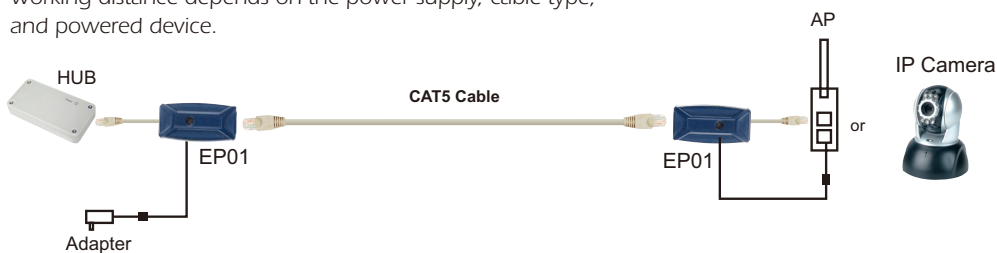
- Identical to IP02, but over CAT5 cable instead of coaxial cable.
- Long range transmission up to 1200 meters ( Max.)



## EP01

### Easy POE – Passive

- Send power to remote over unused pairs of 100baseT network cable.
- Including 2 units/one pair, do not include power adapter.
- Working distance depends on the power supply, cable type, and powered device.



## IP04

### POE Repeater

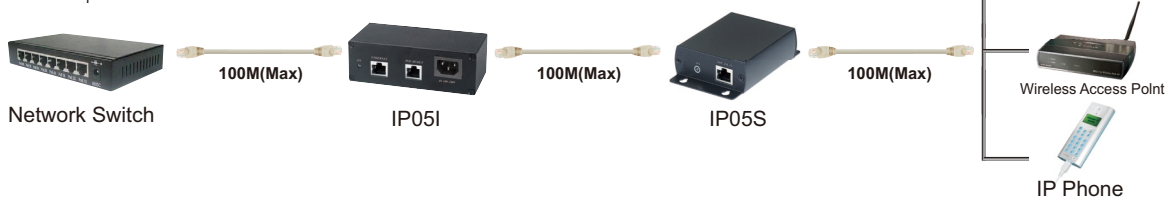
- Extend of both power and data beyond 100 meters.
- Maximum range up to 300 meters.
- No external power required.
- Compatible IEEE 802.3af POE standard.
- Support 10/100/1000 BASE-T transmission rate.
- Built in LED status indication.
- Plug and play for easy installation.



## IP05

### POE Kit For DC5V/DC12V IP Camera

- Include IP05I POE injector and IP05S POE splitter.
- Compatible IEEE 802.3af (12.95W) POE standard, PSE/PD.
- IP05I provides DC 48V power over RJ-45 Ethernet cable to device with Ethernet port.
- IP05S splits the DC48V power over RJ-45 Ethernet cable into DC 5V/12V output.
- Adjustable two different output voltage options (5V/2A, 12V/1A) to fit various devices.
- Supports POE power up to 12.95 Watts for POE port.
- Support 10/100/1000 BASE-T transmission rate.
- Power input LED indication.
- Distance up to 100 meters.

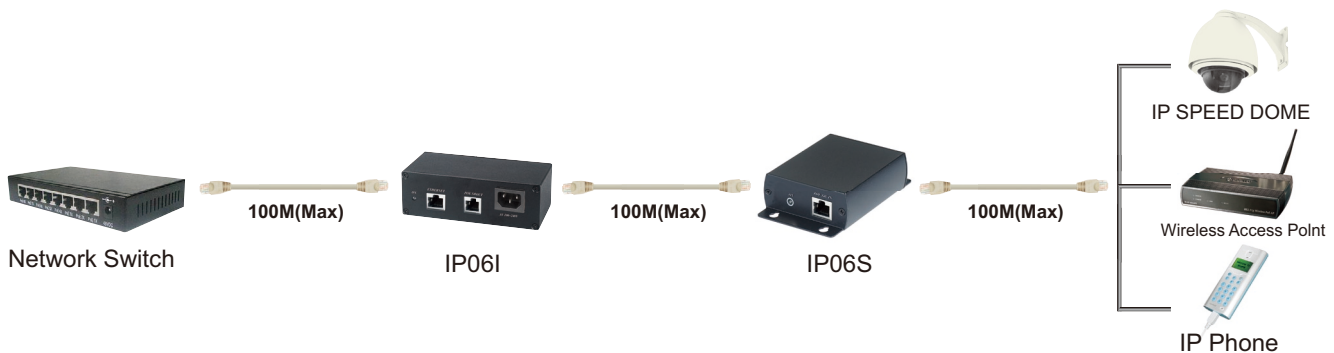


## IP06

### High Power POE Kit or DC5V/DC12V IP Camera

• Include IP06I POE injector and IP06S POE splitter.

- Complies with IEEE 802.3at Gigabit high power over Ethernet pre-standard, PSE/PD.
- IP06I provides DC 54V power over RJ-45 Ethernet cable to devices with Ethernet port.
- IP06S splits the 54V DC power over RJ-45 Ethernet cable into DC 5V/12V output.
- Adjustable two different output voltage options (5V/ 4.5A, 12V/ 2A) to fit various devices.
- Supports POE power up to 25 Watts for POE port.
- Support 10/100/1000 BASE-T transmission rate.
- IEEE 802.3at devices compatible.
- Power input LED indication.
- Distance up to 100 meters.



IP Cabling Transmission

## SP006

### Network Surge Protector

- Perfect for IP camera, network, PC modem, server... protection.
- RJ45 Jack to RJ45 Jack.
- Four pairs protection.
- Perfect for IP camera, network, PC modem, server... protection.
- Protects UTP twisted pair products (TTA11 1AV multifunction transceiver) or any computer equipment.



## SP006P

### POE Surge Protector

- Application for POE (Power over Ethernet) protection.
- Protects equipment from high voltage surges from nearby lightning strikes.
- RJ45 Jack to RJ45 Jack
- Power and signal line protection.
- 10/100 Base-T CAT5/CAT5e compatible.
- Support Mid-Span POE and End Span POE.
- 802.3af POE (Power over Ethernet) compatible.



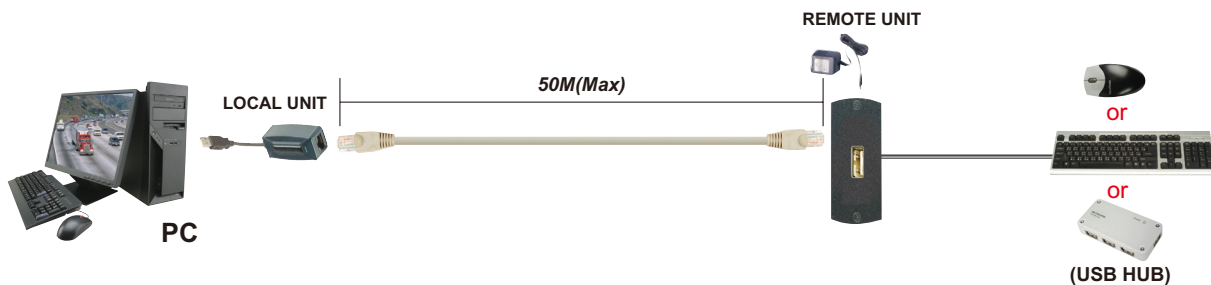
# CAT5 VGA Transmission

## CAT5 Extender: VGA ,USB, Keyboard Mouse

### UE01

#### USB 1.0 CAT5 Extender - Single port

- Extend one USB device up to 50 meters over CAT5/5E cable.
- USB 1.1 compliant.
- Passive type, no external power required.
- Including local and remote unit.
- **LED indication when there is no sufficient drawn current to send signals, using optional power adapter for external power supply.**
- Application for extending USB peripheral devices, such as keyboard, mouse, IP camera, printer, etc.



### UE02

#### USB 2.0 CAT5 Extender with 4 Port USB Hub

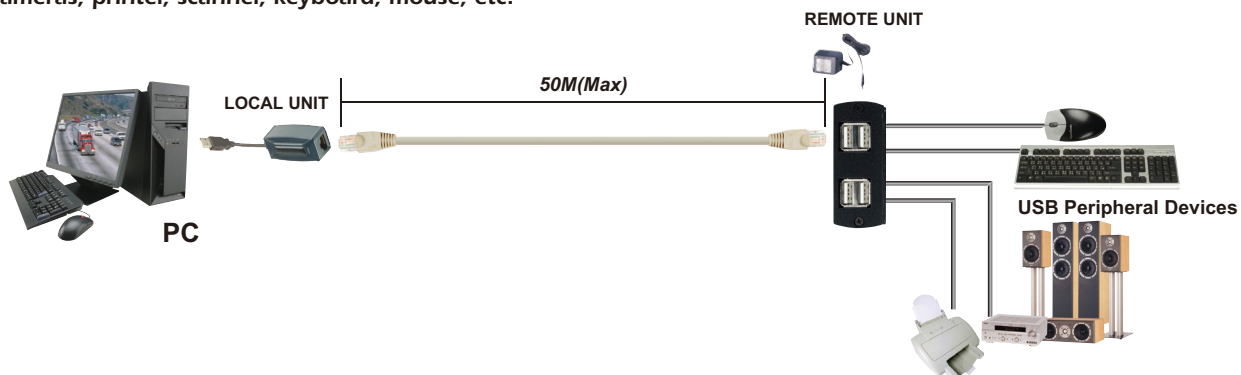
- **Extend four USB devices up to 150 meters over CAT5/5E cable.**
- Supports USB 2.0 high-speed and USB 1.1 (low-speed, full speed) devices.
- Including local and remote unit, 1 x 5V external power supply.
- Remote unit built in 4 port hub to connect 4 USB devices.
- Plug and play for easy operation.
- Application for extending USB 2.0 peripheral devices, such as security cameras, printer, scanner, keyboard, mouse, etc.



### UE04H

#### USB CAT5 Extender with 4 Port USB 1.1 Hub

- **Extend four USB devices up to 50 meters over CAT5/5E cable.**
- USB 1.1 compliant.
- Including local and remote unit.
- Compact size, easy plug and play.
- **Application for extending USB peripheral devices, such as security cameras, printer, scanner, keyboard, mouse, etc.**

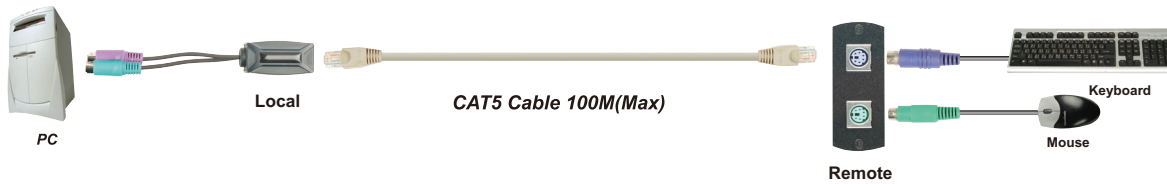


# CAT5 VGA Transmission

## KM01

### Keyboard Mouse CAT5 Extender - PS/2 Interface

- Extend PS/2 Keyboard and mouse via one CAT5 UTP cable.
- Including local and remote unit.
- **Local unit: PS/2 with 6" lead to RJ45, Remote unit: RJ45 to PS/2.**
- Passive, no power required.
- Transmission range up to **100 meters.**



## KM02

### Keyboard Mouse CAT5 Extender – USB Interface at Local Unit

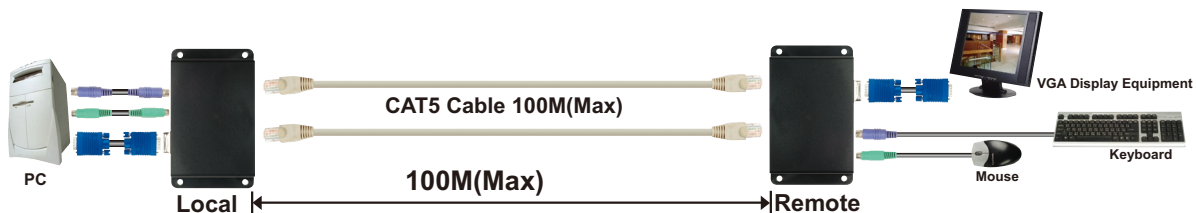
- Extend USB keyboard and mouse via one CAT5 UTP cable.
- Including local and remote unit.
- **Local unit (PC side): USB to RJ45, Remote unit (keyboard mouse side): RJ45 to PS/2.**
- Passive, no power required.
- Transmission range up to **100 meters.**



## VKM01

### VGA Keyboard Mouse CAT5 Extender – PS/2 Interface

- Extend VGA and keyboard mouse over 2 CAT5 UTP cables instead of VGA cable and keyboard mouse cable.
- Including local and remote unit.
- Passive, no power required.
- Transmission range up to **100 meters.**



## VKM02

### VGA Keyboard Mouse CAT5 Extender – USB Interface at Local Unit

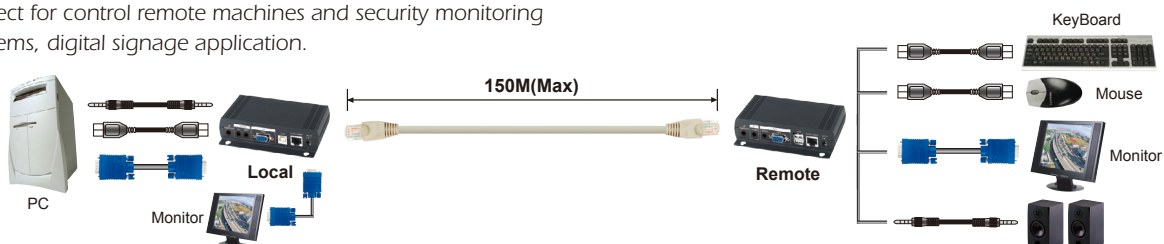
- Identical to VKM01, but the keyboard mouse is USB Interface at local unit.



## VKM03

### VGA & USB with Stereo Audio CAT5 Extender

- Extend VGA, stereo audio, IR and USB signals over one CAT5 cable instead of VGA, stereo audio and keyboard mouse cable.
- USB 1.1 for keyboard mouse application
- **Supports up to 1920 x 1080.**
- Including local and remote unit.
- **Transmission range up to 150 meters.**
- Perfect for control remote machines and security monitoring systems, digital signage application.

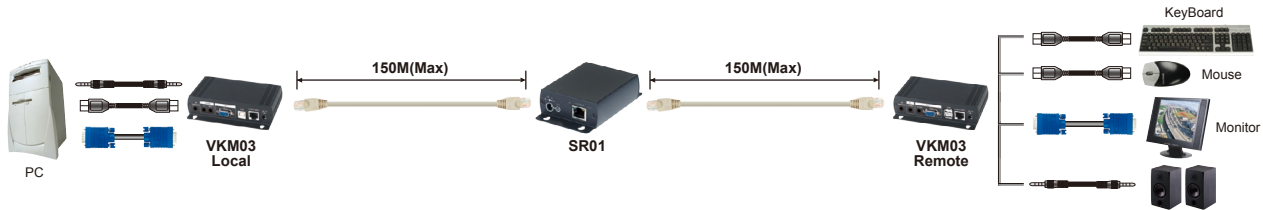


# CAT5 VGA Transmission

## SR01

### Signal Repeater

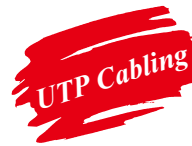
- Extend data signal over CAT5 cable.
- **Application for UE02 USB CAT5 Extender up to 240 meters.**
- **Application for VKM03 VGA+USB CAT5 Extender up to 300 meters.**
- Built in LED status indication.
- External power required.
- Plug and play for easy installation.



## TTP111VGA

### CAT5 VGA Extender

- Passive device, no power required.
- Supports up to 1280x1024 pixels.
- **Up to 135 meters via standard 4 pairs CAT5 STP or UTP cable instead of VGA cable.**
- Transmitter built in virtual DDC to avoid improperly setting at resolution and frequency.
- Transmitter built in sync mode selection for signal stability.
- Receiver built in sync filter level adjustment for signal stability.
- **Option model: Wall Plate type , VW01**



## TTA111VGA

### Active Long Range VGA Extender

- Active type, including transmitter and receiver.
- Built in contrast, brightness adjustment at receiver.
- Supports up to 1600x1200 @85Hz
- **Use 4 pairs CAT5 UTP cable instead of VGA cable.**
- **Long range transmission up to 300 meters (Max.)**



## VD02

### VGA & RS232/RS485 Long Range CAT5 Extender

- **Send VGA and RS232/RS485 data over one CAT5 UTP cable instead of VGA cable and data cable.**
- Dual output: 1 VGA loop output for local, plus 1 CAT5 RJ45 output for remote side.
- Each set including transmitter and receiver, power supply included.
- Supports up to 1600x1200 @85Hz.
- **Long range transmission up to 300 meters (Max.)**
- Application for sending video images to a projector and controlling it from your desk.
- **Perfect for touch screen or auto control equipment application.**

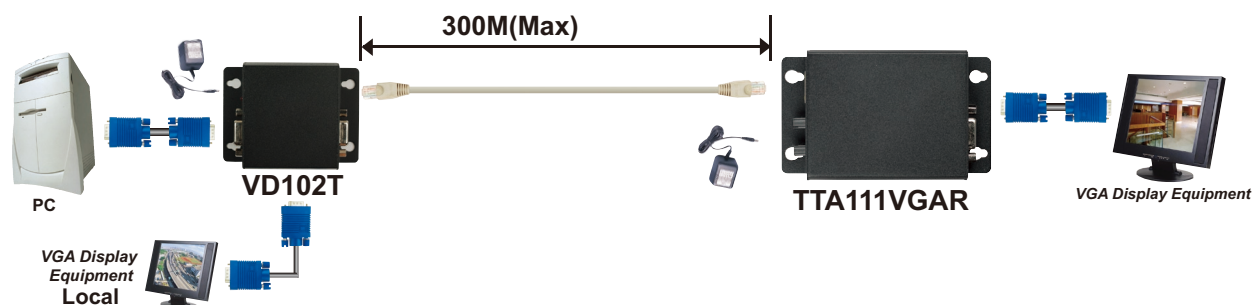


## CAT5 VGA Distribution Amplifier

### VD102

#### CAT5 VGA 1 Input to 2 Output Distributor

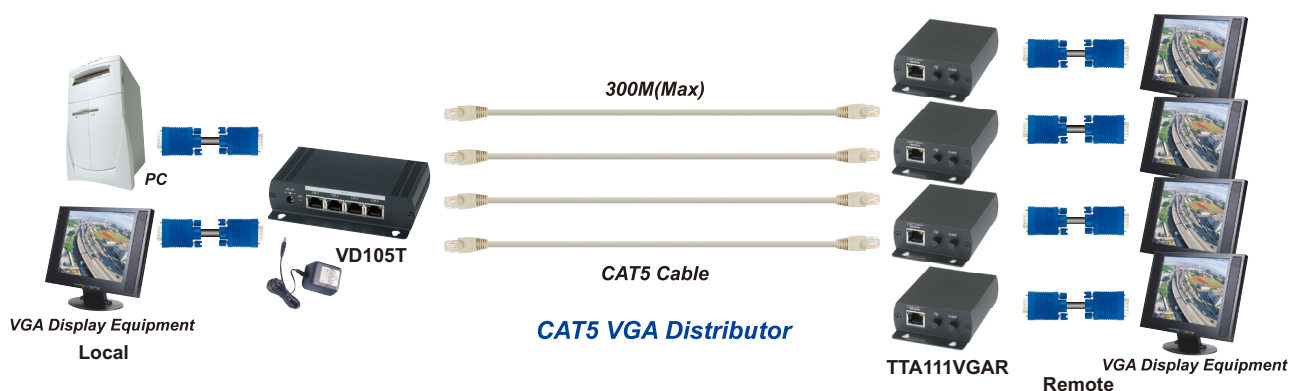
- Each set including one piece VD102T transmitter and one piece TTA111VGAR receiver.
- **Dual output: 1 VGA loop output for local, plus 1 CAT5 RJ45 output for remote side.**
- Use **CAT5 cable** instead of VGA cable.
- **Long range transmission up to 300 meters (Max.)**
- Built in contrast, brightness adjustment at Receiver.
- Supports up to 1600x1200 @85Hz.
- **CAT5 receiver option model: VE02DAL5**



### VD105

#### CAT5 VGA 1 Input to 5 Output Distributor

- **Identical to VD102, but VD105T transmitter output: 1 VGA loop output for local, plus 4 x CAT5 RJ45 output for remote side.**
- Each set including one piece VD105T transmitter and one piece TTA111VGAR receiver.
- **Each VGA display equipment request one TTA111VGAR receiver at remote side. (Order separately).**
- **CAT5 receiver option model: TTA111VGAR, VE02DAL5.**



### TTA111VGAR

#### CAT5 Long Range VGA Receiver (VD105 Option model)

- **Work with VD105 as receiver for extra remote VGA display equipment.**
- Built in contrast, brightness adjustment
- Supports up to 1600x1200 @85Hz.
- Long range transmission up to 300 meters (Max.)

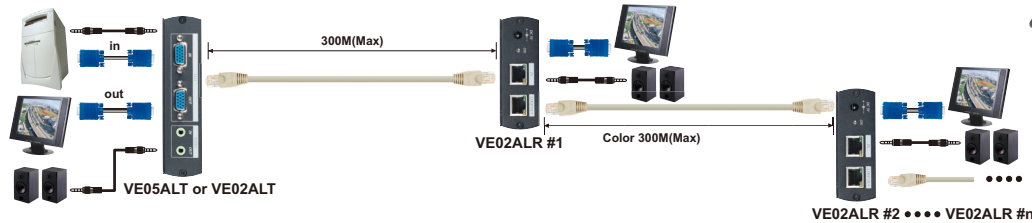


# CAT5 VGA Transmission

## VE02AL

### 1 in 3 Out VGA & Stereo Audio CAT5 Extender Distribution Amplifier – Chainable Function

- Extends and distributes VGA and stereo audio over one UTP CAT5 cable.
- Supports up to 1600x1200 @85Hz.
- Long range transmission up to 300 meters (Max.)
- **Dual output: 1 VGA loop output for local, plus 2 x CAT5 RJ45 output for remote side.**
- **Built in equalization, gain adjustment, chainable CAT5 output at remote unit.**
- VE02ALT local output: supports DDC, DDC2, DDC 2B, and virtual DDC, DDC backup function.
- Audio by digital encoding process for sound undistorted.
- **CAT5 receiver option model: VE02ALR, VE02DALS**



VE02ALT



VE02ALR

Chainable

VGA + Audio

## VE05AL

### 1 in 5 Out VGA & Stereo Audio CAT5 Extender Distribution Amplifier - Chainable function

- **Identical to VE02ALT, but VE05ALT transmitter output: 1 VGA loop output for local, plus 4 x CAT5 RJ45 output for remote side.**
- Each set including one piece VE05ALT transmitter and one piece VE02ALR receiver.
- Each VGA display equipment request one VE02ALR receiver at remote side. (Order separately).
- **CAT5 receiver option model: VE02ALR, VE02DALS.**



VE05ALT



VE02ALR

## VE10DAL

### 1 in 10 Out VGA & Stereo/Digital Audio CAT5 Extender Distribution Amplifier In 1U Rack Mounting Panel

- Extends and distributes one VGA and stereo audio signal to 10 displays.
- Extends signals up to 300 meters over CAT5 cable.
- Supports up to 1600x1200 @85Hz.
- **Built in one loop out allows cascading connection multi units for larger display system.**
- Local VGA loop out: supports DDC, DDC2, DDC 2B, and virtual DDC, DDC backup function.
- Audio by digital encoding process for sound undistorted.
- **CAT5 receiver option model: VE02ALR, VE02DALS.**

1U Rack Mounting



NEW

## VE02ALR

### VGA & Stereo Audio CAT5 Receiver– Chainable function

- **Work with VE02ALT/ VE05ALT, VE02ALR as receiver for extra remote VGA display equipment.**
- **It could be daisy chained to another VE02ALR to extend working range over 300 meters and multiple displays.**
- Built in equalization, gain adjustment.

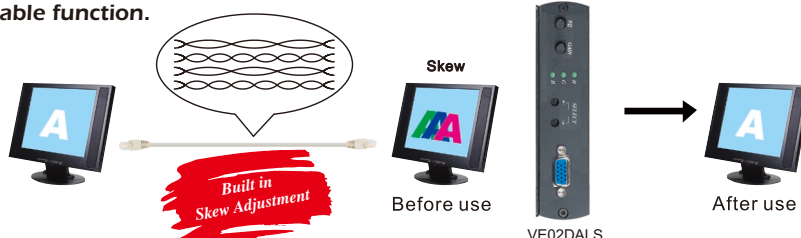


NEW

## VE02DALS

### VGA & Stereo/Digital Audio CAT5 Receiver– Built in Skew Corrector

- **Work with TTA111VT, VD102T, VD105T, VE02ALT, VE05ALT, as receiver, but built in RGB skew corrector for the optimum video performance under long cable run.**
- **Built in digital audio output ( coaxial, optical)**
- **Built in chainable function.**



NEW

## 19" 3U Rack Card Solution for CAT5 VGA Distribution System

### RB01

#### 3U 19" Rack Mounting Cabinet

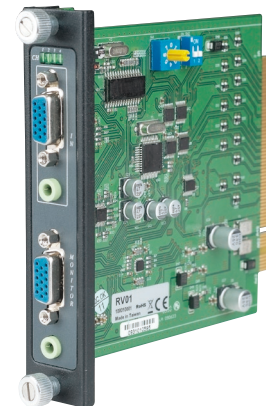
- Standard 19" 3U rack mounting cabinet.
- Allow to insert 15 rack cards (RV01, RT01).
- Built in 1000W switching power supply (+5V 10Amp, -5V 10Amp).
- Built in fan for low operating temperature.
- Ideal for multi input/output VGA, stereo/digital audio distribution. Perfect for used in shopping malls, public address systems, airports, train & bus station, boardrooms, trade shows, computer based training application.



### RV01

#### 1 Channel VGA & Stereo/Digital Audio Input Rack Card

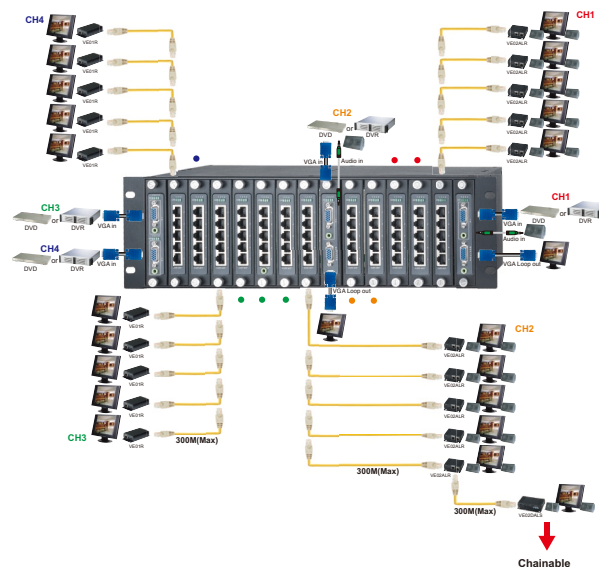
- 19" rack card with one VGA & stereo audio input and one loop output.
- Loop out could be for local monitoring or daisy chain application.
- Automatic identify digital or analog audio input.
- Audio output could be digital or analog conversion. (Digital audio only support PCM format).
- Support DDC and built in EDID, backup monitor EDID function.
- Maximum supports up to 4 channel VGA & stereo/digital audio input cards (RV01 x 4 pieces) in one RB01 rack mounting cabinet.
- Each input could allow multi outputs via RT01 (5 Channel CAT5 output rack card).
- Used to work with RT01 CAT5 5 channel transmitter rack card for multi input/output distribution over CAT5 cable.



### RT01

#### 5 Channel CAT5 VGA & Audio Output Rack Card

- 19" rack card with 5 Channel CAT5 output as a CAT5 transmitter, to extend VGA & audio over one CAT5 cable.
- Remote monitoring side using CAT5 receiver box, such as VE02ALR, VE02DAL5.
- VGA resolution support up to 1600 x 1200@85Hz.
- Long range transmission up to 300 meters (Max.)
- 4 input signal option with LED indication.
- Automatic scan each channel.
- Allow up to 14 pieces RT01 CAT5 transmitter card at RB01, to send multi distribution up to 70 remote monitors.



#### Option Model:

TTA111VGAR: VGA Receiver

VE02ALR: VGA & Stereo Audio CAT5 Receiver- Chainable function

VE02DAL5: VGA & Stereo Audio, Digital Audio CAT5 Receiver- Built in Skew Adjustment

# CAT5 VGA Transmission

## VGA Converter

### AD001

#### Video to VGA Converter

- Special designed for CCTV color monitor.
- Support NTSC, PAL video system.
- On screen display function: brightness, contrast, color, tint.
- **The DEINTERLACED output mode: NTSC: 640 x 480, PAL: 768 x 576.**
- **PAL, NTSC auto configure. (NTSC system for CRT/LCD monitor, PAL system for CRT monitor only).**
- Compact size, plug and play installation.



### AD001H

#### Hi Resolution Video to VGA Converter with BNC loop out

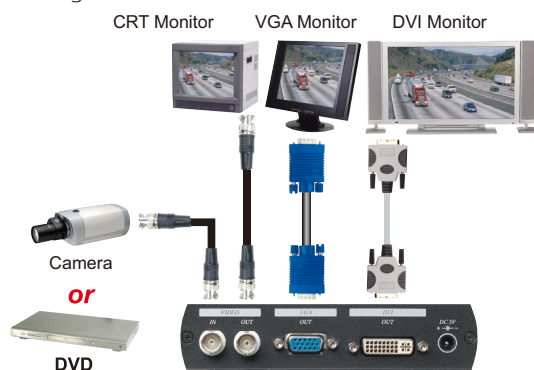
- Special designed for computer VGA monitor, LCD color monitor.
- Dual output: DB15 x 1 for VGA monitor and BNC x 1 for TV monitor.
- Support NTSC, PAL video system.
- **Input video system 50 to 60Hz frame rate detection (NTSC/PAL).**
- **The DEINTERLACED and Scan rate conversion output mode: 800 x 600, 1024 x 768, up to 1280\*1024@60Hz.**
- **Frequency output: 60Hz, 75Hz, 85Hz.**
- On screen display function: Contrast, Brightness, Color, Tint, Features, Resolution.
- Built in ESD protection.
- Built in video auto gain control for good quality picture.



### AD001HD

#### High Resolution Video to VGA Converter with BNC and DVI loop out

- Special designed for computer VGA/DVI monitor, LCD color monitor.
- Composite video inputs via BNC, VGA, and DVIH output.
- Support NTSC, PAL video system.
- **Input video system 50 to 60Hz frame rate detection (NTSC/PAL).**
- **The DEINTERLACED and Scan rate conversion output mode: 800 x 600, 1024 x 768, up to 1280\*1024@60Hz.**
- **Frequency output: 60Hz, 75Hz, 85Hz.**
- On screen display function: Contrast, Brightness, Color, Tint, Features, Resolution.



### VC01

#### VGA to Video Converter

- **Connects VGA output to existing TV or CRT monitor.**
- Video standards: NTSC/NTSC-EIAJ/PAL/PAL-M/PAL-N/SECAM.
- Resolutions support: 640 x 480 (up to 85 Hz), 800 x 600 (up to 85 Hz) and 1024 x 768 (up to 75 Hz).
- **Dual output ports: composite video (BNC connector), VGA (DB15).**
- Image controls: Horizontal and vertical size, brightness, contrast, hue, saturation, sharpness and on screen display background.
- Simple and quick to install; Windows and Mac compatible.

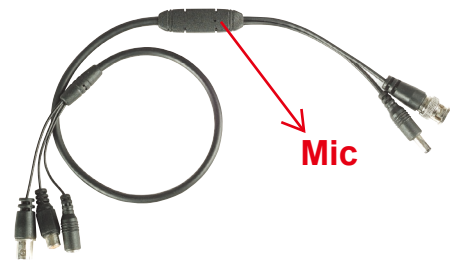
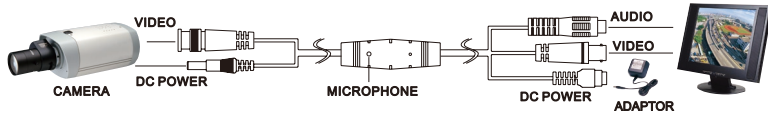


## Audio pick up box

### AA001

#### In Line Audio Pickup Box

- Audio pick up works individually without any other equipment.
- One add-on mini audio box for all cameras which need audio function.
- High sensitive microphone (-65dB) and DC12V power regulator built-in box.



### AA002

#### Audio pick up box

- Add-on mini audio box for all cameras that require an audio function.
- High sensitivity microphone with 45cm power/audio cable.
- Easy to install and ideal for all security surveillance needs.
- DC12V power operation.



### AA003

#### Mini Hidden Type Microphone

- One add-on mini hidden audio board for all cameras which need audio function.
- High sensitive microphone with 50cm power/audio cable.
- Easy to install and ideal for all security surveillance needs.
- DC12V power operation.

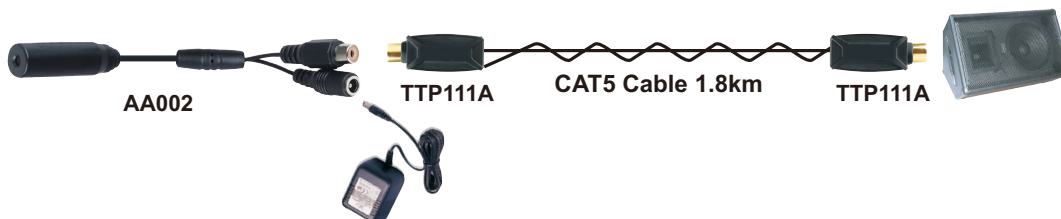


## CAT5 Audio & Video Extender

### TTP111A

#### Audio Transceiver

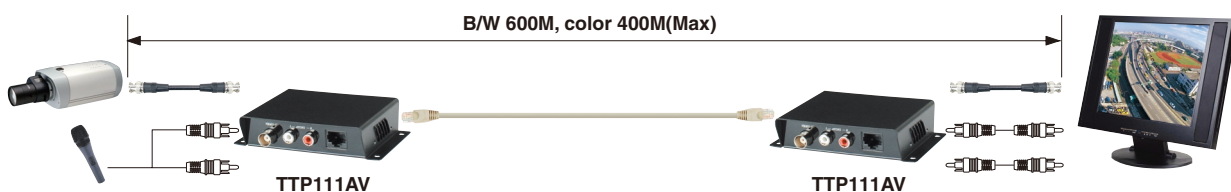
- RCA female to 2 pin screw terminal.
- Used in pairs via CAT5 UTP cable to send audio signal up to 1.8KM.
- 20Hz to 20KHz Bandwidth.
- Available for 75-120ohm cable.
- Hi performance to eliminate audio ground loop problem.



### TTP111AV

#### Audio & Video Transceiver

- BNC female +2 RCA female to RJ45 female.
- Video and stereo audio transmission over one CAT 5 cable.
- Two ways audio and one video over one CAT5 cable.
- Option model: RCA type, TTP111AVR



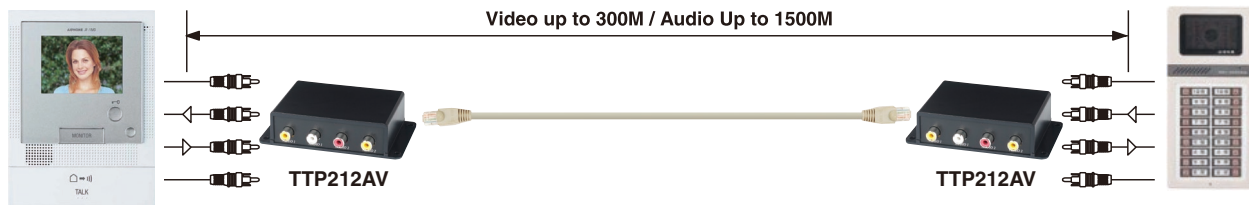
# Video & Audio Transmission

## TTP212AV

### Dual Audio & Video Transceiver

- 4 RCA female to RJ45.
- Dual video and audio transmission over one CAT 5 cable.
- **Perfect for intercom application.**

**Dual AV**



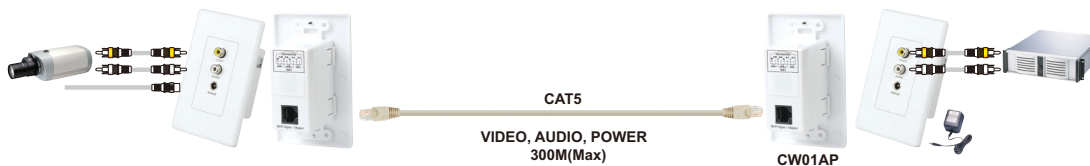
## CW01AP

### Wall Plate Video, Audio, Power CAT5 Extender

- Used in pairs via one CAT5 UTP cable to send video, audio and power up to 300 meters.
- Wall mountable type for a neat and cleaner installation.
- Wall plate outer dimension: 115 x 71 mm
- 2 x RCA female for video and audio, 1 x DC jack for power.
- Passive, no power required.
- Perfect for integrated home security and entertainment application.

**NEW**

**Home Security**



## CW02AP

### Wall Plate Video, Audio, Power CAT5 Extender

- Identical to CW01AP, but wall plate outer dimension is 86 x 86 mm.

**NEW**

**Could fit all European Wall mounting Box**



## HDMI CAT5 Extender/Converter

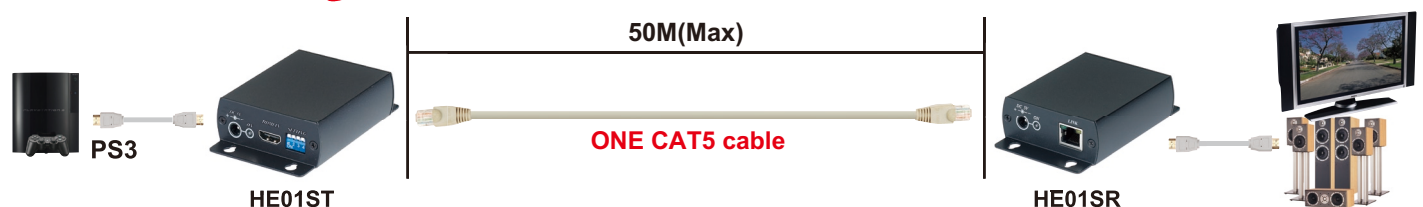
### HE01S

#### HDMI CAT5 Extender – Single CAT5 Cable

- Extends HDMI signal over one CAT5/5e/6 cable.
- HDMI 1.3 compliant.
- Transmission range up to 50 meters at 1080p resolution.
- HDCP compliant.

**NEW**

**Single CAT5**



# Video & Audio Transmission

## HE01E

### HDMI CAT5 Extender – Two CAT5 Cable

- Extends HDMI signal over two CAT5/5e/6 cables.
- Transmission range up to 70M at 1080i, 50M at 1080p resolution.
- Including local and remote unit.
- External power supply requested at remote unit for transmission range over 30 meters.
- Hi quality digital video and audio over CAT5 without any signal loss.
- HDMI compliant.
- HDCP compliant.



## VH01

### VGA to HDMI Converter with Local loop VGA output

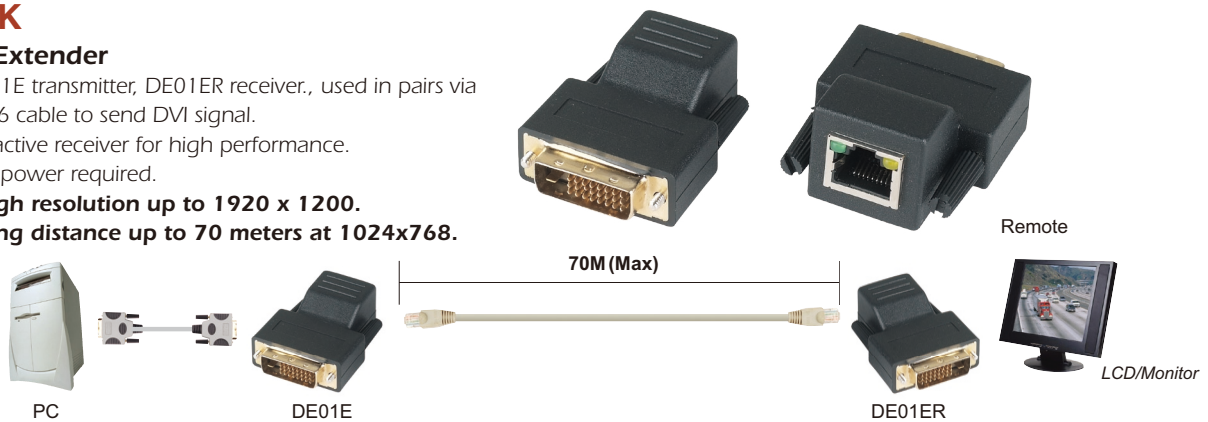
- Convert VGA & stereo/Digital (SPDIF) audio to HDMI display.
- Built in local VGA loop output with stereo/Digital (SPDIF) audio.
- Support HDMI & DVI output mode. (Package not includes HDMI to DVI cable/adapter).
- Encodes analog stereo audio or digital audio onto the video signal for HDMI video and audio.
- Supports PC resolution up to 1920 x 1080.



## DE01ERK

### DVI CAT5 Extender

- Include DE01E transmitter, DE01ER receiver., used in pairs via one CAT5E/6 cable to send DVI signal.
- DE01ER as active receiver for high performance.
- No external power required.
- Support high resolution up to 1920 x 1200.
- Support long distance up to 70 meters at 1024x768.



## Video Distribution Amplifier

### CD102

#### 1 Input to 2 Output Video Distributor

- 1 video input to 2 video output.
- Dual Power: DC12V / AC24V.



### CD102A

#### 1 Input to 2 Output Video Distribution Amplifier

- 1 video input to 2 video output.
- 10dB video gain compensation amplification and HF compensation.
- Sharpness and brightness adjustment, perfect to work with DVR.
- Transmission range: 1000 meters (RG59 coaxial cable)



### CD104

#### 1 Input to 4 Output Video Distributor

- 1 video input to 4 video output.
- Dual Power: DC12V/ AC24V



### CD108

#### 1 Input to 8 Output Video Distributor

- 1 video input to 8 video output.



### CD408

#### 4 Input to 8 Output Video Distributor

- 4 video input to 8 video output.



# Video & Audio Transmission

## CD408A

### 4 Input to 8 Output Video Distribution Amplifier

- 4 video input to 8 video output.
- 10dB video gain compensation amplification and HF compensation.
- Sharpness and brightness adjustment, perfect to work with DVR.
- Transmission range: 1000 meters (RG59 coaxial cable)



## CD116

### 1 Input to 16 Output Video Distributor In 1U Rack Mounting Panel

- 1 video input to 16 video output.



## CD816

### 8 Input to 16 Output Video Distributor

- 8 video input to 16 video output.
- **Automatic gain control ( $\pm 6$ dB range), normalizes output signals to standard video level 1Vp-p.**
- **Blue LED: video signal on/off detection at each channel.**
- 50Hz/60Hz input rejection of 60dB.
- Built in out-of-band noise filter.
- Dual Power: DC12V / AC24V



## CD816P

### Programmable 8 Input to 16 Output Video Distributor

- **Professional version, configurable at 8 video inputs/16 video outputs by software, jumperless for easy setting.**
- LED display and 4 buttons for setting, each operation.
- Each video input (8) could set up "1-16" video outputs.
- Built in memory function, no need resetting after power disconnection.
- **Channel 16 including extra "switcher output" function.**
- **DWELL time adjustable at Switcher mode (1~30 seconds).**



## CD816A

### 8 Input to 16 Output Video Distribution Amplifier In 1U Rack Mounting Panel

- 8 video input to 16 video output.
- Dual Power: DC12V / AC24V.
- 10dB video gain compensation amplification and HF compensation.
- Sharpness and brightness adjustment, perfect to work with DVR.
- Transmission range: 1000 meters (RG59 coaxial cable)



# Video & Audio Transmission

## CD1632A

### 16 Input 32 Output Video Distribution Amplifier

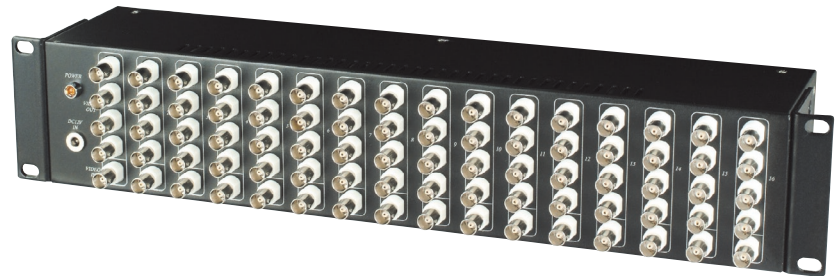
- 16 video input to 32 video output.
- 10dB video gain compensation amplification and HF compensation.
- Sharpness and brightness adjustment, perfect to work with DVR.
- Transmission range: 1000 meters (RG59 coaxial cable)
- Red Led: Power ON/OFF



## CD1664

### 16 Input to 64 Output Video Distributor In 2U Rack Mounting Panel

- 16 video input to 64 video output.
- Red Led: Power ON/OFF



Video & Audio  
Transmission

## Video Amplifier

### CA101

#### 1 Input to 1 Output Video Amplifier

- 1 video input to 1 video output.
- 10dB video gain compensation amplification and HF compensation.
- Sharpness and brightness adjustment, perfect to work with DVR.
- Transmission range: 1000 meters (RG59 coaxial cable)



### CA101A

#### 1 Input to 1 Output Video & Audio Amplifier

- Video & Audio amplifier.
- Others identical to CA101



### CA404

#### 4 Input to 4 Output Video Amplifier

- 4 video input to 4 video output.
- 10dB video gain compensation amplification and HF compensation.
- Sharpness and brightness adjustment, perfect to work with DVR.
- Transmission range: 1000 meters (RG59 coaxial cable)



### CA101VH

#### 1 Input to 1 Output Video Amplifier, HF/MF/LF Compensation

- HF/MF/LF compensation for color gain and adjustable brightness & contrast for cleaner, sharper looking picture.
- Built in Input impedance, balance, liner gain adjustment.
- **Built in surge protection.**
- **Perfect to maintain good quality picture for long-range transmission with DVR.**
- Transmission range: 1500 meters (RG59 coaxial cable)
- Use with CA101, transmission range could be up to 2KM.



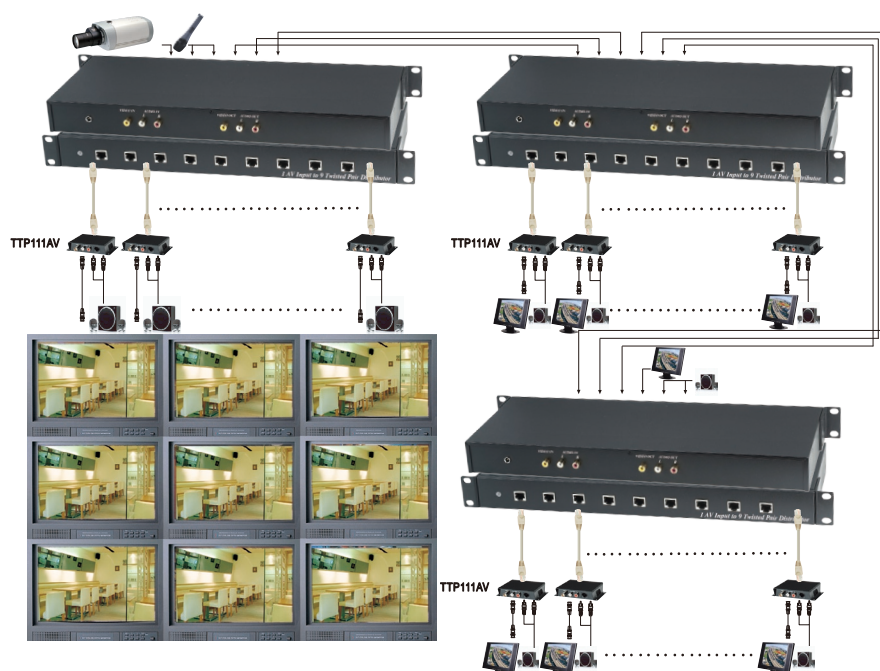
# Video & Audio Transmission

## AV Distribution Amplifier

### TDA109AV

Audio & Video Twisted Pair Distribution Booster in 1 1U Rack Mounting Panel

- 1 AV Input to 9 AV Twisted Pair Output.
- Built in loop output allows cascading connection of several units for larger displays.
- Work with TTP111AV, perfect for school education system, multimedia AV application.
- TDA109AV Receiver Option model: TTP111AV



### CD816AVP

Programmable 8 Input to 16 Output AV Distributor

- Professional version, configurable at 8 AV inputs/16 AV outputs by software, jumperless for easy setting.
- LED display and 4 buttons for setting, each operation.
- Each video input (8) could set up "1-16" AV outputs.
- Built in memory function, no need resetting after power disconnection.
- Channel 16 including extra "switcher output" function.
- DWELL time adjustable at Switcher mode (1~30 seconds).

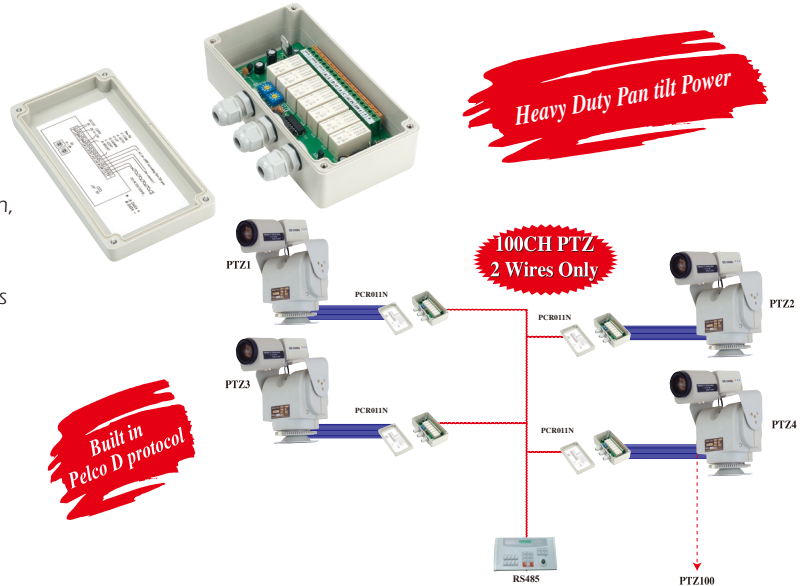


## Smart PTZ Transmission

### PCR011N

#### PTZ Receiver

- Built in PELCO D protocol
- IP65 Weatherproof case
- PAN & TILT control
- Lens control: zoom, focus
- 1 Auxiliary Relay provide for any desired functions: alarm, wash/wipers, lighting
- Easy addressed code setting. ( 00-99)
- Allows the pan tilt power AC110V/220V/24V, zoom lens power DC12 or 6V (2A-Max.)
- Support heavy duty Pan tilt working power up to 16 Amp (current).
- Built in surge protection
- Support all pan, tilt, zoom lens

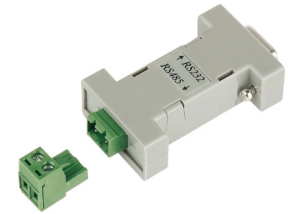


## Data Converter

### RS001

#### RS232 to RS485 Converter

- DB9 female connector for RS232 to 2 wires terminal block for RS485.
- Two wire, differential signals, half duplex.
- Non power operation.
- Auto switching baud rate, speed up to 115.2 Kbps over a distance 1200 meters.
- 32 units connected together in RS-485 multi drop operation.



### RS001I

#### RS232 to RS485 Converter-Isolation

- Identical to RS001, but built in 3KV isolation protection.
- External power adapter requested.



### RS002

#### RS232 to RS485/RS422 Bi-Directional Converter

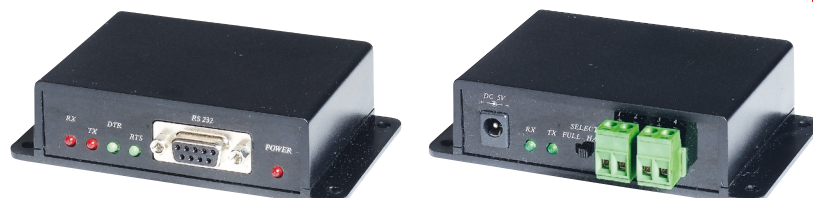
- RS232 input option: DB9 or RJ11.
- RS485/RS422 output option: terminal or RJ11.
- RS232 to RS485 or RS232 to RS422 conversion.
- Four full duplex wires; two half duplex wires.
- Switch setting for full duplex or half duplex operation.
- Auto baud rate sensing.
- Supports transfer speeds of up to 115.2Kbps.
- Extends up to 1200 meters (under 100Kbps).
- Support up to 32 units to be set in RS-485 multi drop installations.
- LEDs indications for power and signal status monitoring.
- Over current protection when 2 signals are shortened together at the RS422/485 end.
- Surge protection 16KV ESD.
- Built in termination resistors.



### RS002I

#### RS232 to RS485/RS422 Bi-Directional Converter-Isolation

- Identical to RS002, but without RJ11 output and built in 3KV isolation protection.



# Data Transmission

## RS003

### USB to RS485 Converter Isolation

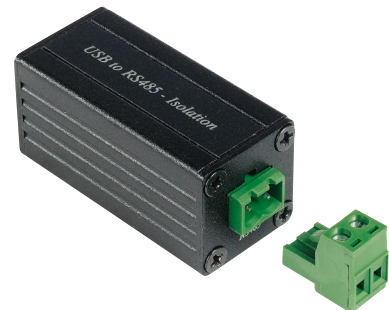
- USB to RS485 interface converter.
- Two wire, differential signals, **half duplex**.
- **Non power operation.**
- Auto switching baud rate, speed up to 115.2 Kbps over a distance 1200 meters.
- 32 units connected together in RS-485 multi drop installations.
- USB 2.0 compliant
- Powered by PC
- Connect/disconnect without reboot
- Windows 98, ME, XP & 2000 Compatible
- MAC OS 8.6 to 9.2 Compatible
- Software drivers included



## RS003I

### USB to RS485 Converter Isolation

- Identical to RS003, but built in 3KV isolation protection.



## RS232U

### USB to RS232 (Serial) Converter

- USB to RS232 DB9 serial interface converter.
- Non power operation.
- Support RS232 transfer rate up to 115.2Kbps.
- USB 2.0 Compliant.
- Powered by PC.
- Connect/Disconnect Without Reboot.
- Windows 98, ME, 2000, XP & 2003 , VISTA Compatible.
- MAC OS 8.6 to 9.2 Compatible.

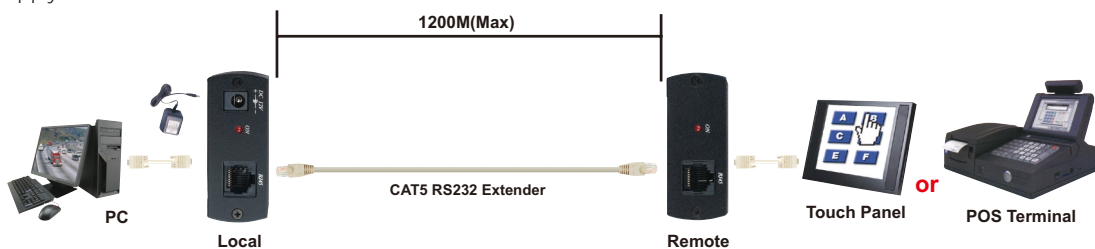


## Data Extender, Repeater

## RS002E

### RS232 CAT5 Extender

- Extends any RS232 compliant devices up to 1200 meters at 57600 bps.
- One CAT5/5E cable.
- Easy plug and play installation.
- Speed up to 115.2Kbps.
- Including local and remote unit, 1 x 5V external power supply.
- Single power supply used at local unit.



## RS001R

### RS485 Data Repeater

- Repeater from RS485 data signal to RS485 up to 1200 meters.
- Plug in screw terminal block for easy wiring.
- Power input from DC jack.
- Auto detected baud rate maximum up to 115.2 Kbps.
- Red Led: Power/RX
- Built in 2.5KV isolation protection.
- Surge protection.

*RS485 Data Repeater*



## RS485 Distributor

### RS004

#### RS485 Distributor 1 Input 4 Output

- Input option: 1 x RS232, 2 x RS485 (3 input can be "stand by" status at the same time, but only one controller will be activated at once)
- Output: 4xRS485, each channel connection range up to 1200 meters by twisted pair cable.
- Built in surge protection at each channel.
- Each input/output is isolated.
- Ability to cascade connection to other units RS004/RS008/RS016.
- The application gives serial data back on 4 outputs at the same time, to provide perfect configurations.



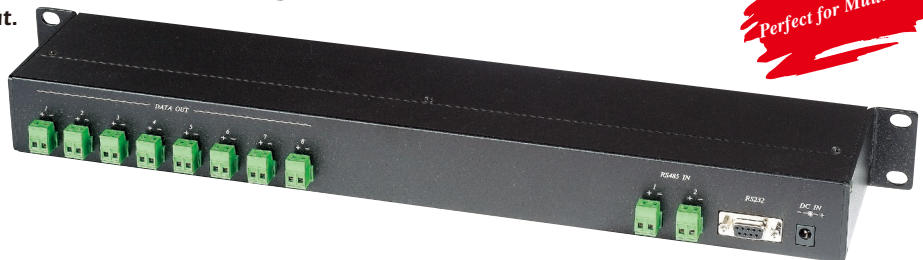
Data Transmission

### RS008

#### RS485 Distributor 1 Input 8 Output In 1U Rack Mounting Panel

- Identical to RS004, but 1 input 8 output.

*Perfect for Multi Data*

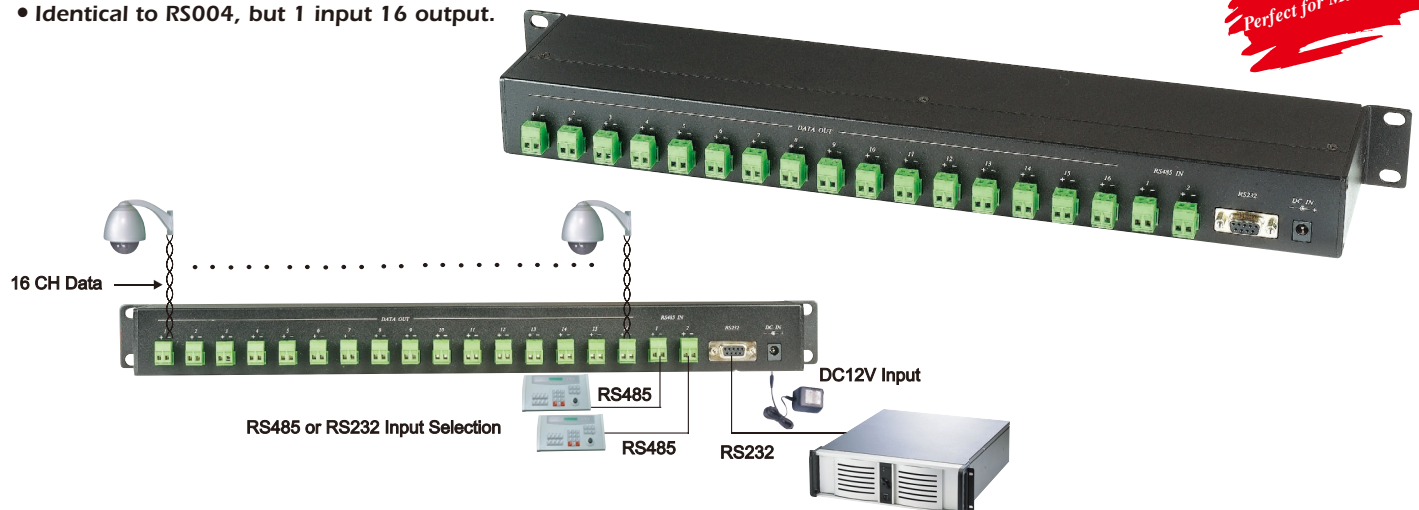


### RS016

#### RS485 Distributor 1 Input 16 Output In 1U Rack Mounting Panel

- Identical to RS004, but 1 input 16 output.

*Perfect for Multi Data*



# Surge Protection Device

- Performs a different function from grounding requirements.
- Protects equipment from high voltage surges from nearby lightning strikes.
- Two stage protection: under 1ns – 90V, over 10ns-12V.
- Wide range of applications: CCTV/CATV system, antenna of television, FM receivers, video camera, monitors, multiplexers & quad processor, VCR, etc.

## SP001

### Coaxial Video Surge Protector BNC Connector

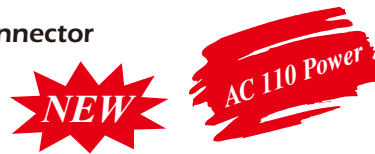
- BNC male to BNC female, hi frequency for CCTV use.



## SP001P-AC110

### AC Power Surge protection Device Terminal Connector

- Terminal connector to terminal connector.
- Application for protecting AC100-120V
- Surge current capacity: 6000A (8x20uS)
- Surge voltage capacity: 6,000V (1.2uS x 50uS)



## SP001P-AC220

### AC Power Surge protection Device Terminal Connector

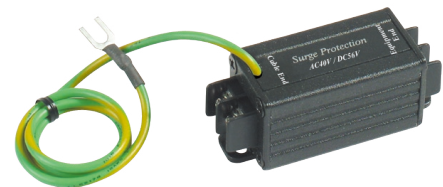
- Terminal connector to terminal connector.
- Application for protecting AC220-240V.
- Surge current capacity: 6000A (8x20uS)
- Surge voltage capacity: 6,000V (1.2uS x 50uS)



## SP001P

### Power Surge Protector

- 2 pin terminal for power input to 2 pin terminal for power output.
- Max power input AC40V(MAX),DC56V(MAX).
- Application for protecting camera power.
- Max current up to 2Amp.



## SP001VP

### Video & Power Surge Protector

- Two stage protection: 130V, AC/DC12V
- 3 pin terminal + BNC male to 2 pin terminal + BNC female
- Max power input AC40V(MAX), DC56V(MAX)
- Max current up to 2Amp



## SP001VPD

### Video, Power, Data Surge Protector

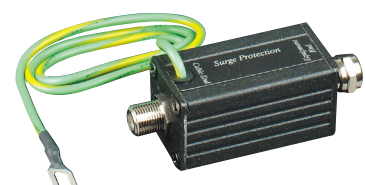
- Identical to SP001VP, but with Data protection.
- 5 pin terminal + BNC male to 4 pin terminal + BNC female.
- Max power input AC40V(MAX), DC56V(MAX).
- Max current up to 2Amp.
- Perfect for PTZ camera protection.



## SP002

### Coaxial Surge Protector F Connector

- F male to F female, Hi frequency for CCTV use.



# Surge Protection Device

## SP002VP

### Video & Power Surge Protector

- Identical to SP001VP, but with F connector instead of BNC.



## SP002VPD

### Video, Power, Data Surge Protector

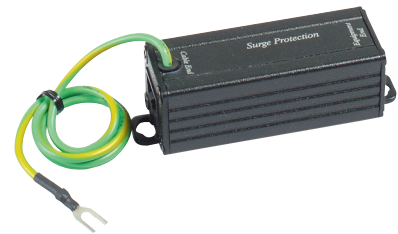
- Identical to SP001VPD, but with F connector instead of BNC.



## SP003

### UTP Video Surge Protector RJ45 Connector

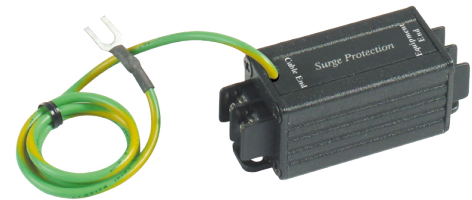
- RJ45 Jack to RJ45 Jack
- Two pairs protection ( Blue pair and Brown pair)
- Protects UTP twisted pair transmission products.



## SP004

### UTP Data Surge Protector Terminal Connector

- Terminal connector to terminal connector.
- Perfect for video or data signal protection.



## SP004VPD

### UTP Video, Power, Data Surge Protector

- Terminal connector to terminal connector.
- Application for UTP cabling video, power, data protection.
- Could be two data, one power for access control application.



## SP005

### Video and Data Surge Protector

- BNC female + terminal to BNC female + terminal
- Perfect for speed dome camera & control signal.



## SP006

### Network Surge Protector

- RJ45 jack to RJ45 jack
- Four pairs protection
- Perfect for IP camera, network, PC modem, server... protection.
- Protects UTP twisted pair products (TA111 AV multifunction transceiver) or any computer equipment with utilizing networking cable.

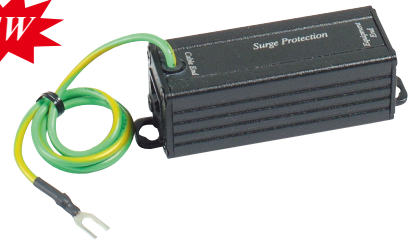


# Surge Protection Device

## SP006P

### POE Surge Protector

- RJ45 Jack to RJ45 Jack
- Power and signal line protection.
- 10/100 Base-T CAT5/CAT5e compatible.
- 802.3af POE (Power over Ethernet) compatible.
- **Application for POE (Power over Ethernet) protection.**



## SP016C

### 16 Channel Video Surge Protection for DVR in 1U Rack Mounting Panel

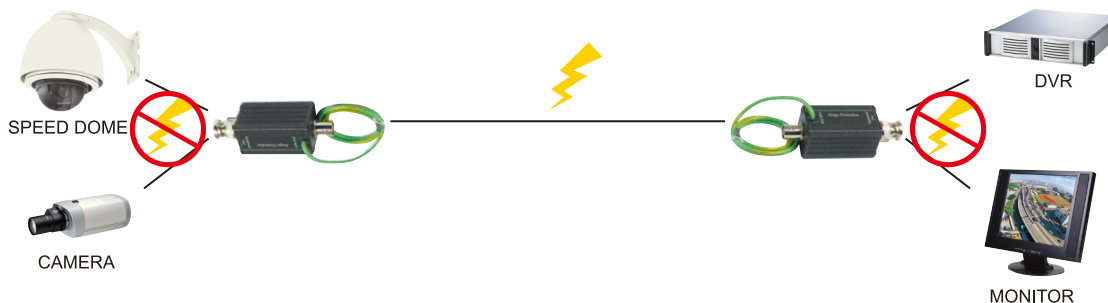
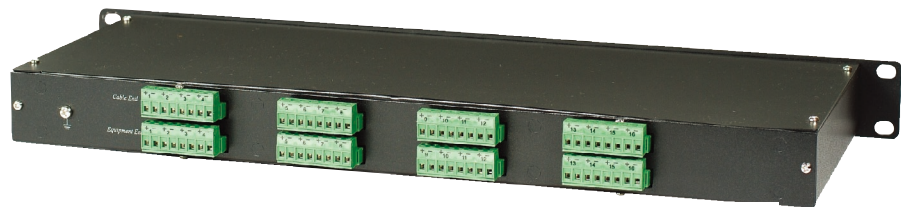
- For coaxial cable use, 16 BNC female to BNC female.
- Provide protection for DVR, multiplexers or any equipment with multiple video inputs.



## SP016T

### 16 Channel UTP Surge Protection for DVR in 1U Rack Mounting Panel

- For twisted pair cable use, 16 terminal connector to 16 terminal connector.
- Ideal for 16 channel video or data protection.



### Specification

ITEM NO.	SP001	SP002	SP003	SP004	SP005	SP006 SP006P	SP001P-AC	SP001P	SP001VP SP002VP	SP001VPD SP002VPD SP004VPD	SP016C	SP016T	
Surge Protection Attack Time	1ns												
Maximum Surge Voltage	4KV												
Surge Life	300 surges of 100Amps												
Normal Resistance Across Coax	10,000 MΩ												
Surge Resistance	Approx. 0Ω												
Band Pass	0~1 GHZ												
Power Passing Capability	130V AC/DC, 65 Vrms at10 Amps						110V AC, 220V AC		130V DC/AC, 65 Vrms at10 Amps				
Insertion Loss	Less than 0.2 dB												
Return Loss (75 ohms)	16dB												
Power Input							MAX. 240V AC		AC 40V (MAX), DC56V (MAX)				
Connectors	BNC	F	RJ45	Terminal	Terminal & BNC	RJ45	Terminal	Terminal	Terminal & BNC/F/ Terminal		BNC	Terminal	
Dimensions	mm	78x25x25	78x25x25	85x25x25	65x25x25	87x67x27	87x67x27	87x67x27	65x25x25	87x67x27	87x67x27	482x170x44mm standard 1U Rack Panel	
Weight	g	80	80	90	65	136	134	130	65	136	136	1200	1200

# Solution Provider for different Video Interference

## Video Ground Loop Isolator

Video ground loop isolator could reduce “ground loop interference” with CCTV signals and can be easily installed in a new or added to existing systems. It is useful where a video signal is transmitted via cable between points with different ground potentials, the differences in ground potentials are typically caused by unbalanced power line loads.

### GL001

#### Coaxial Video Ground Loop Isolator

- BNC male to BNC female with mini cable 15cm on both sides.
- Passive, no power required.
- Prevents video-signal distortion caused by video ground loops.
- Eliminates picture tearing, cross talk and rolling.
- Prevents power cables laid by others interfering with the CCTV system.
- Built in TVS ( Transient Voltage Suppressors) for surge protection.



### GB001

#### Coaxial Video Ground Loop Isolator Built in Video BALUN

- Identical to GL001 ground loop isolator function.
- Built in Video BALUN, perfect to work with DVR to immunity DVR interference, for extra interference rejection.



### TGP001

#### Twisted Pair Ground Loop Isolator Built in Video BALUN

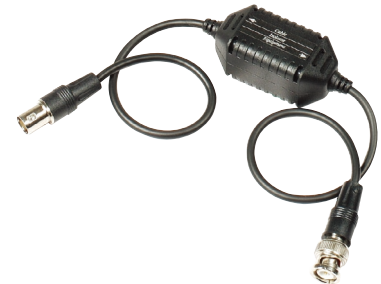
- BNC male to 2 pin terminal block.
- Identical to GL001, but for twisted pair cable use.
- Transmit a full motion monochrome video signal up to 600 meters, color video signal up to 300 meters.
- Eliminate coaxial cable.



### GL001H

#### Hi Performance Video Ground Loop Isolator

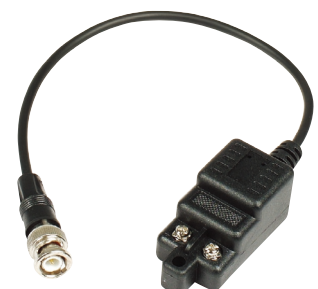
- BNC male to BNC female with mini cable 15cm on both sides.
- Passive type, no power need.
- Hi performance to eliminate ground loop problem.
- Low video loss , bandwidth: 20hz -6Mhz. +0/-3dB.



### TGP001H

#### Twisted Pair Hi Performance Video Ground Loop Isolator

- Identical to GL001H, but for twisted pair cable use.



Before use



After use

# Solution Provider for different Video Interference

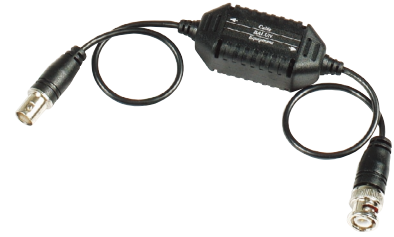
## Video Transformer Filter

"Impedance not matching" happened under long range cabling, or weak and strong differential signals into DVR would cause Video SYNC signal not balanced that results in picture "up-rolling". For coaxial cabling, add CB001VH (coaxial BALUN) for extra interference rejection; for twisted pair cabling, add TVB001.

### CB001VH

#### Coaxial BALUN For DVR

- BNC male to BNC female with mini cable 30cm.
- Perfect work with DVR to immunity DVR interference.
- Built in a highly balanced mode of video transmission, which is immune to interference from these, and other sources of noise: data signals, other video signals, nearby power, ringing telephones, fluorescent lights, transformers, and more...



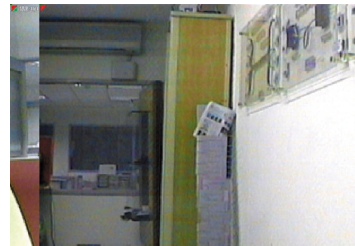
### TVB001

#### Twisted Pair VIDEO BALUN

- Eliminate interference under long range cabling caused by "Impedance Matching", add TVB001 BALUN at "connecting point" between two-wire connections for compensation.
- Including 4 pieces UY connectors for connection.



Before use



After use

## Hi Frequency Interference Blocker

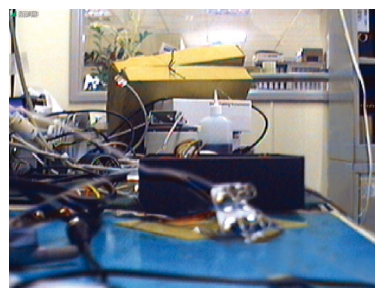
Block the interference from electromagnetic wave, high voltage electricity, wireless station, elevators, heavy power on industry,...etc

### CHB001H (CHB001HT + CHB001HR)

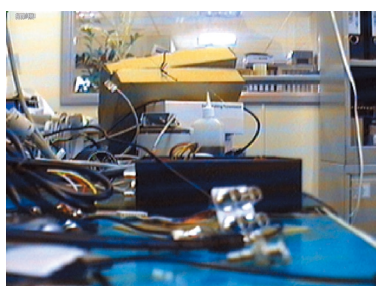
- Perfect to eliminate hi frequency interference.
- Video & audio over one coaxial cable.
- Working distance: 400 meters (RG59), 600 meters (RG6)
- S/N Ratio on video signal: 42dB, S/N ratio on audio signal: 40dB
- Including transmitter and receiver, two power adapter.



Before use



After use



Before use



After use



CHB001HT



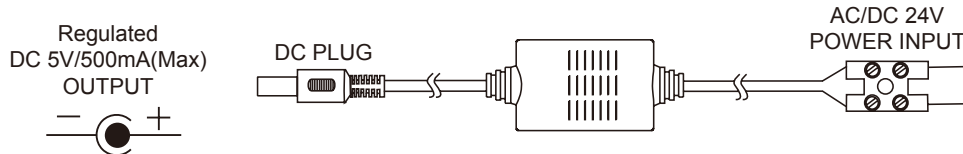
CHB001HR

## Power Converter & Distributor Box

### PC500

#### AC to DC 12V Power Converter 500mA

- AC to DC12V power converter with DC plug cable 500mA Max. .
- Input power: AC15~26V; DC15-28V.
- Output Power: DC12V regulated.
- For DC type camera or video power sources convert using AC24V for professional CCTV Industry Installation.



### PC500S

#### AC to DC 12V Power Converter 500mA Built in Surge Protection

- Identical to PC500, but built in surge protection at power input.



### PC500-5V

#### AC to DC 5V Power Converter 500mA

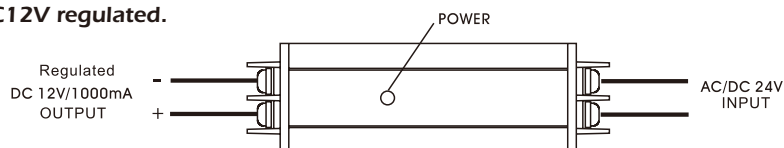
- AC24V/ DC12V to DC5V power converter with DC plug cable 500mA Max.
- Input power: AC8~26V; DC8~28V.
- **Output Power: DC5V regulated.**
- Application for sending computer accessories 5V power from power sources AC24V or DC12V.



### PC1A

#### AC to DC 12V Power Converter 1000mA

- Identical to PC500, but with 1000mA max.
- Input power: AC18 – 26V; DC18-28V.
- **Output Power: DC12V regulated.**



### PC1A-5V

#### AC to DC 5V Power Converter 1000mA

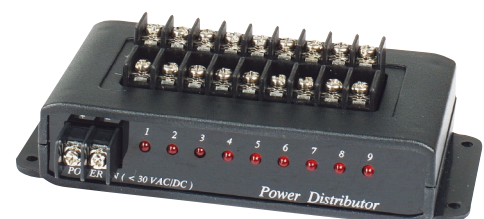
- AC24V/DC12V to DC5V power converter.
- Input power: AC8 ~26V; DC8-28V.
- **Output Power: DC5V regulated.**
- Application for sending computer accessories 5V power from power sources AC24V or DC12V.



### PD009

#### 1 Input to 9 Output Power Distributor Box

- Individually protected PTC\*-type output fuse rated 1.1Amps @250VAC.AC to DC12V
- Individual status LED indicators.
- Surge protected outputs.
- Supports up to 1-30VAC/VDC



# Power Center

## SWP124200

### DC12V 4.2Amp Switching Power Supply

- 90V-240 VAC Input. 12VDC 4.2Amp regulated output.



## 19" Rack Mounting Panel

### PR801

#### 8Amp 1 Port AC24V Power Supply in 1U Rack Mounting Panel

- 1 port power supply. AC120/230V to AC24V / 8A (Max) output.
- Built in "no fuse breaker" to avoid current overload.
- **Toroidal transformer for high efficiency and low operating temperature.**



### PR801-12R

#### 8Amp 1 Port DC12V Regulated Power Supply in 1U Rack Mounting Panel

- 1 port, switching regulated power supply.

### PR816

#### 8Amp 16 Port AC24V Power Supply in 1U Rack Mounting Panel

- 16 port power supply, AC120V/230V to AC24V /0.5A (Max) output.
- **Each port output current 1.1Amp (Max).**
- Built in "no fuse breaker" to avoid current overload.
- **Built in PTC (positive temperature coefficient) fuse for short protection and auto rework on each port.**
- **Toroidal transformer for high efficiency and low operating temperature.**

### PR816-12D

#### 8Amp 16 Port DC12V NON-Regulated Power Supply in 1U Rack Mounting Panel

- 16 port power supply, AC120V/230V to DC12V(non-regulated) /0.5A (Max) output.
- **Each port output current 1.1Amp (Max).**
- Built in "no fuse breaker" to avoid current overload.
- **Built in PTC (positive temperature coefficient) for short protection and auto rework on each port.**
- **Non-load output 17V.**

### PR816-12R

#### 8 Amp 16 Port DC12V Regulated Power Supply in 1U Rack Mounting Panel

- 8 AMP Sixteen port power supply, AC120V/230V to DC12V Switching regulated output.
- AC120V/230V to DC12V Switching regulated output.
- Each port output current 1.1Amp (Max).
- Built in "no fuse breaker" to avoid current overload.
- Built in PTC (positive temperature coefficient) for short protection and auto rework on each port.



### PR1616-12R

#### 16Amp 16 Port DC12V Regulated Power Supply in 1U Rack Mounting Panel

- **Identical to PR816-12R, but 16 AMP Sixteen port power supply.**
- **Built in fan at front and back panel each for low operating temperature.**



## Wall Mounting

### PW408U

#### 4 Amp 8 port DC12V Regulated Power Supply Built in 3AMP Back up Battery

- Built in 12V 3.3AMP rechargeable sealed lead acid battery for power back.
- Wall mounting metal box.
- Automatic switch over to stand-by battery when AC fails.
- LED color Indication on battery: Green: battery full, Yellow: battery recharging, Red: loss of AC, stand-by battery supplying power, Flash Red: low battery.
- Application for access control.

**Built in 3AMP  
Back up Battery**

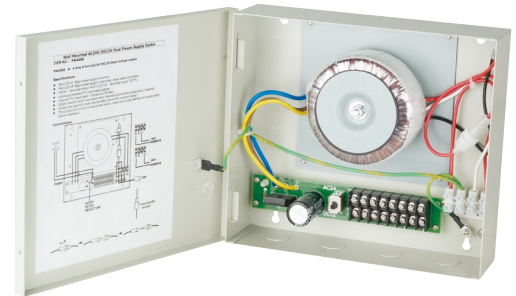


### PW408S

#### 4 Amp 8 port Dual Power Supply

- Dual power AC24V or DC12V selectable.
- Red LED for main power.
- Individual PTC 1.1Amp, (2.5A/4sec.) fuse on each output protection.
- Toroidal transformer for high efficiency and low operating temperature.
- Wall mounting metal box.
- Overall Dimension: 224 x 200 x 60 mm.

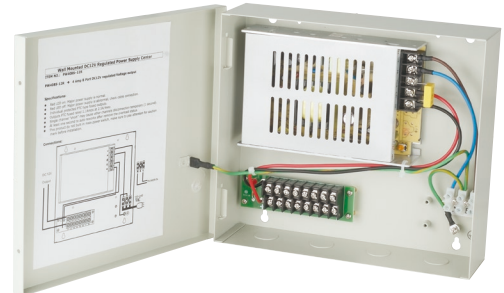
**Dual Power**



### PW408S-12R

#### 4 Amp 8 port DC12V Regulated Power Supply

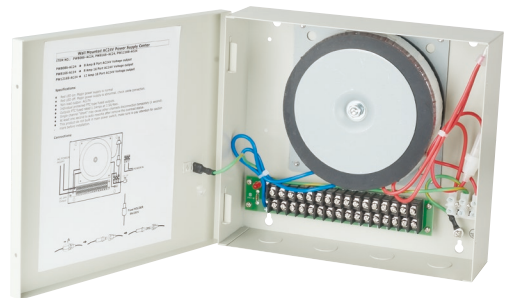
- Identical to PW408S, but with DC12V switching regulated power supply.



### PW816S-AC24

#### 8 Amp 16 port AC24V Power Supply

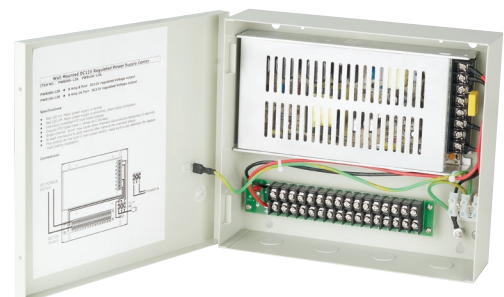
- AC24V, 4Amp 8 port.
- Red LED for main power.
- Individual PTC 1.1Amp, (2.5A/4sec.) fuse on each output protection.
- Toroidal transformer for high efficiency and low operating temperature.
- Wall mounting metal box.
- Overall Dimension: 224 x 200 x 60 mm.



### PW816S-12R

#### 8 Amp 16 port DC12V Regulated Power Supply

- Identical to PW816S-AC24, but with DC12V switching regulated power supply.



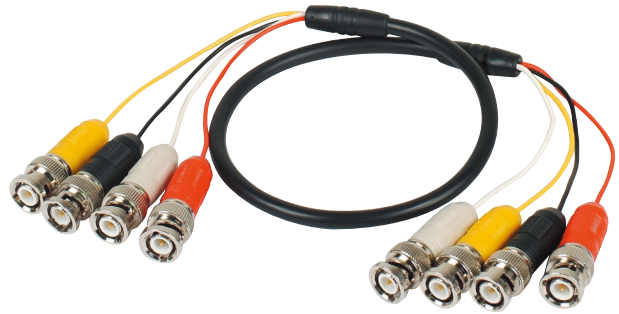
# Accessories

## Wire

### WC414

#### 4 BNC MALE to 4 BNC MALE Cable 100cm

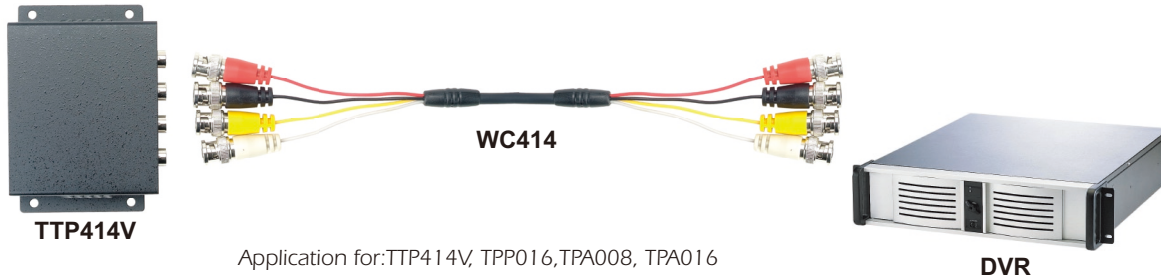
- Ready made coax for quick installation, good for receiver side TTP414V, TPP016, TPA008, TPA016...etc.



### WC414-200

#### 4 BNC MALE to 4 BNC MALE Cable 200cm

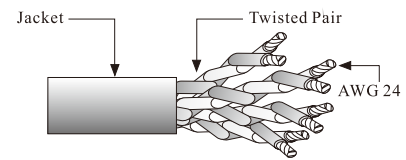
- Identical to WC414, but with 200 cm cable length.



### WT104

#### CAT5e UTP 4 Pairs Twisted Pair Cable

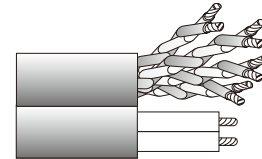
- CAT5e unshielded twisted pair 4 pairs cable. AWG24 solid anneals copper wire.
- 305 meters in one reel.



### WT104P

#### CAT5e UTP 4 Pairs Twisted Pair Cable With Power Cord

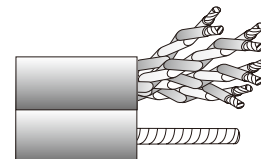
- CAT5e unshielded twisted pair 4 pairs cable. AWG24 solid anneals copper wire.
- Power Cord: 0.75mm diameter
- 100 meters in one reel



### WT104PE

#### Outdoor Use CAT5e UTP 4 Pairs Twisted Pair Cable

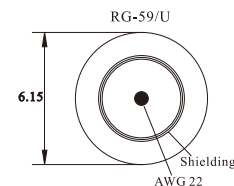
- PE Jacket, messenger material: galvanized steel wire
- 500 meters in one reel.
- Steel wire (1.2mm).



### WC001

#### RG59/U Coaxial Cable

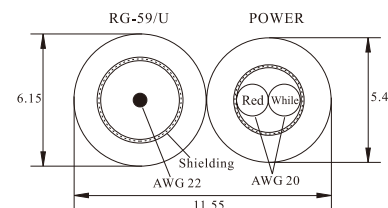
- RG59/U coaxial cable: AWG 22 solid anneal cooper wire. 75 ohms.
- 200 meters in one reel



### WC001P

#### RG59/U Coaxial Cable with Power Cord

- RG59/U Coaxial cable: AWG 22 solid anneal cooper wire. 75 ohms.
- Power cord: 0.75mm diameter
- 100 meters in one reel.



## Tool

### AT001

#### Twisted Pair Tool Kit

- Standard package include: ratchet modular connector crimping tool crimping tool , for 6P2C, 8P8C modular connectors stripper & punch down tool ,universal coaxial crimping tool, RJ45 modular plug (8P8C round solid) x 50pcs, RJ45 protection cap x 20pcs
- Application: everything installers need for identifying, cutting, stripping and terminating twisted pair cable.



### AT002

#### Remote Cable Tester

- Connector: RJ45, USB, BNC (CAT 5/CATV/Cablemodem)
- LEDS Indications: Short LED (Red)  
Connected/25ohms terminator (Green)  
No-Parallel /50ohms terminator (Yellow)  
No connection / No termination (Yellow)  
Battery good / Battery low (Green/Yellow)  
S, C/1,2,3,4,5,6,7,8, LEDS (Yellow)



### AT003

#### Wire Stripper

- For wire (UTP/STP) or wired & multi conductor cable from 3.2mm-9mm max.



### AT005

#### Modular Crimping Tool

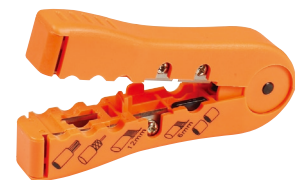
- For 4,6,8 poles modular connector (RJ45, RJ22) ratchet type.
- This tool is for all necessary tools to cut, strip and crimp modular telephone wires.



### AT006

#### Multi-Function Wire Stripper

- The lightweight, compact stripper is simple to operate, provided multifunction and safety.
- Application for stripping coaxial cable and UTP/STP cable.



### AT007

#### Splice & crimp tool for AP007 UY connectors

- Designed to seat UG,UR and UY connectors.
- A special stop behind cutout prevents damage to connectors.



### AT008

#### Coax Crimping Tool

- Application for crimping RG59, RG6 cable.



# Accessories

## AT009

### Coaxial Tool Kit

- Standard package include:
  - Rotary cable stripper for coaxial cable RG58,59,6,62
  - Coaxial cable cutter 6.5" 1 cuts wire O.D. up to 0.41" (10.5mm)
  - Professional ratchet type crimping tool for coaxial connector RG58,59.6
  - BNC male crimp 3 piece type x 20 pieces
- Application: everything installers need for cutting, stripping and terminating coaxial cable.

**NEW**



## Parts

### AP001

#### Modular RJ45 Plug (3 Prongs)

- 8 position 8 contact round solid
- 100 pieces in one bag.



### AP002

#### RJ45 Protection Cap

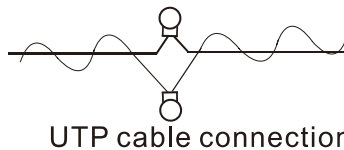
- Provide 5 color for easy identification.
- Red, green, yellow blue, grey 20pcs of each color in one bag (total 100pcs )



### AP007

#### 3M Brand UY connector

- Handle 22 to 26AWG solid copper wire (100piece/box)
- Self-stripping, insulated and moisture - resistant butt connector for 2 wire solid copper conductor combinations for 22-26 AWG (0.65-0.4mm) having maximum Insulation O.D. of 060 inches (1.52mm).

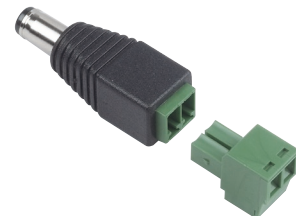


### AP008

#### DC plug to Terminal block

- DC plug (male) to removable terminal block.
- Small size for tight spaces.
- 2.1mm DC plug.
- 10 pieces in one bag.

**NEW**

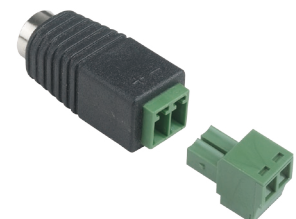


### AP008-F

#### DC Jack to Terminal Block

- Identical to AP008, but with DC Jack (female) instead of Terminal block.

**NEW**



## Connectors (Pack: 100pcs/per bag)

### APB012

BNC Male Solderless



### APBC12

BNC Male Quick Crimp



RG6U

RG59

### APBC13

BNC Male Crimp 3 Piece Type



RG6U

RG59

### APBT11

BNC Male Twist On



RG6U

RG59

### APB310

BNC Male to T Adapter  
BNC Female



### APBR01

BNC Female to RCA Male



### APBR10

BNC Male to RCA Female



### APBR11

BNC Male To RCA Male



### APFT11

F Male Twist on

RG6U

RG59



### APFC12

F Male Crimp Two Piece Type

RG6U

RG59



### APBF10

BNC Plug to F Jack



### APBB00

BNC Female to BNC Female



### APRF10

RCA Male to F Female



### APRR00

RCA Female to Female



### APRR11

RCA Male to Male

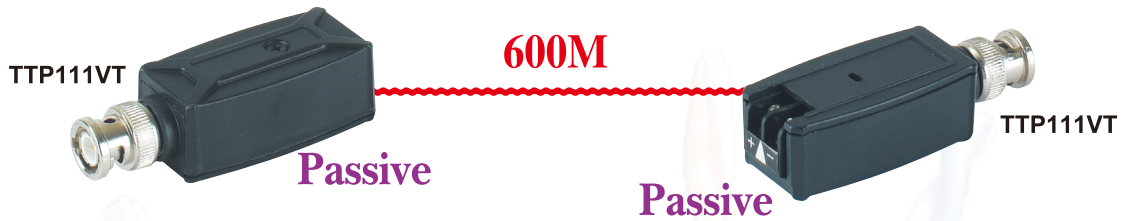


### APDD11

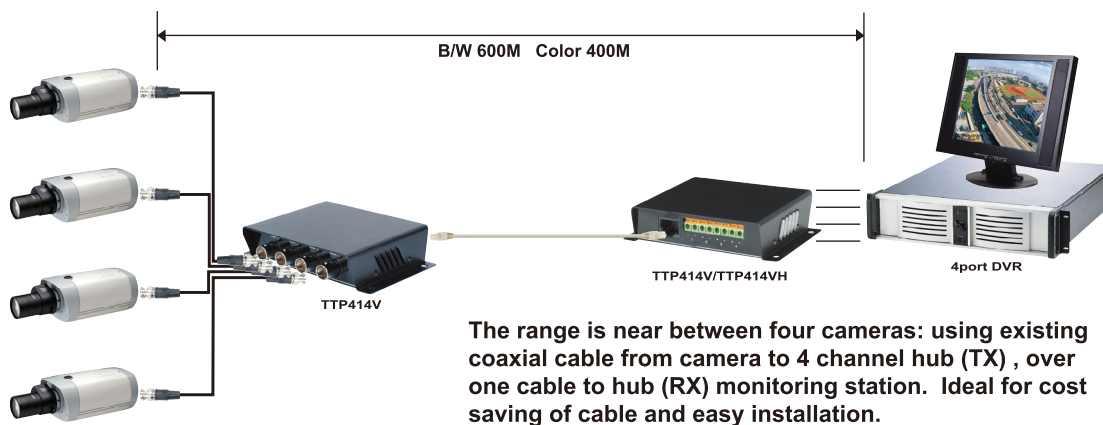
DC Plug to DC Plug



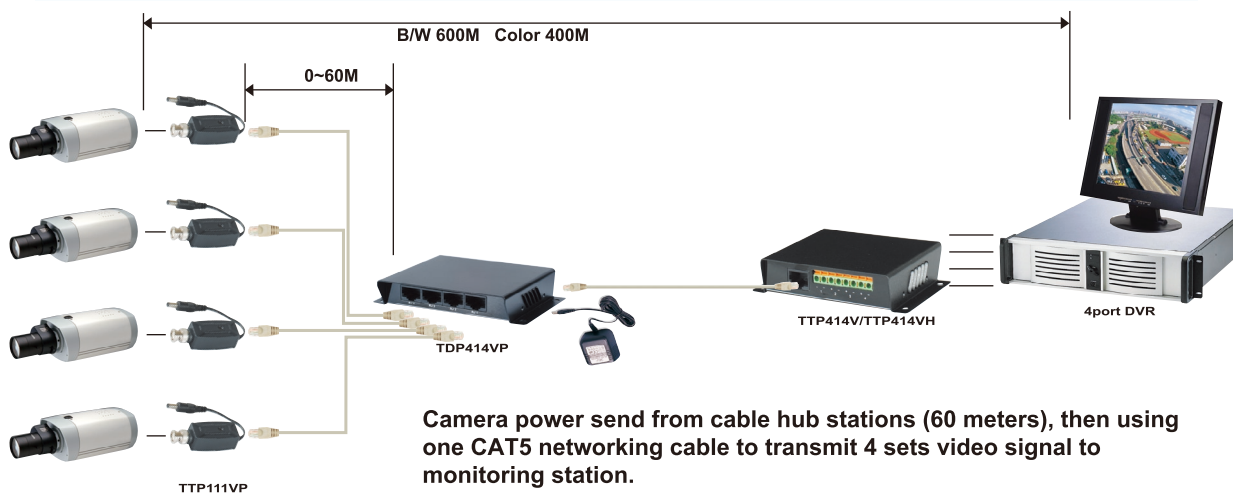
## Twisted Pair Transmission Application



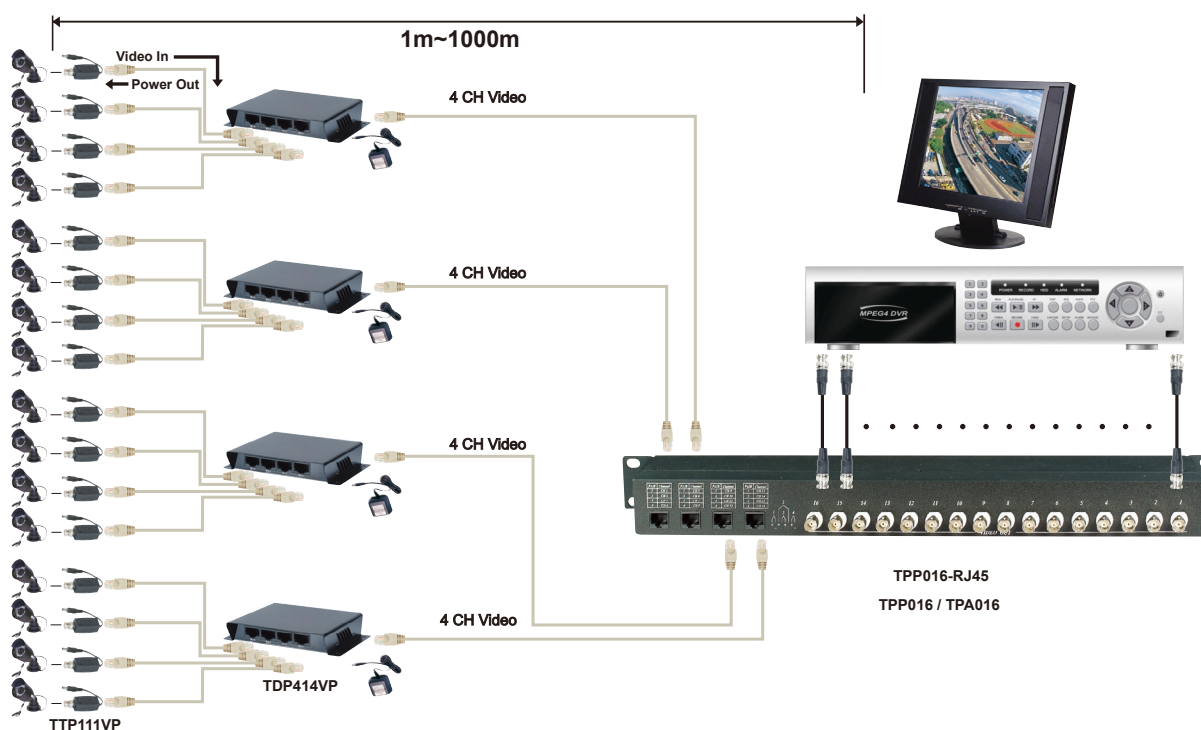
## 4 Channel Hub to Hub CCTV Distribution Application



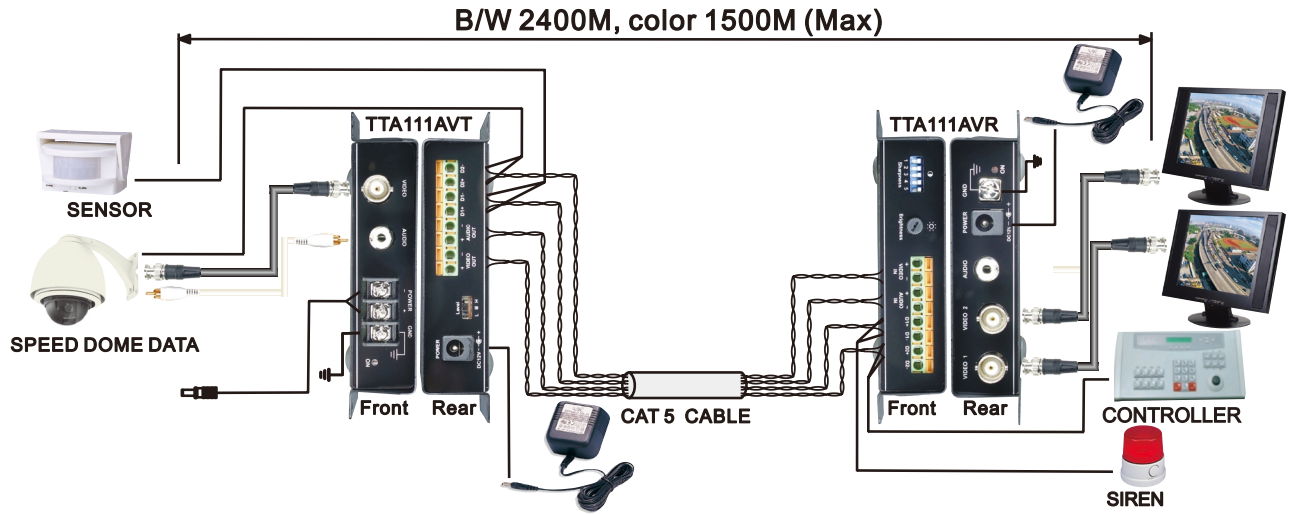
## 4 Cameras Power From Cable Hub Station



## 16 CH Video Power UTP Cabling Application

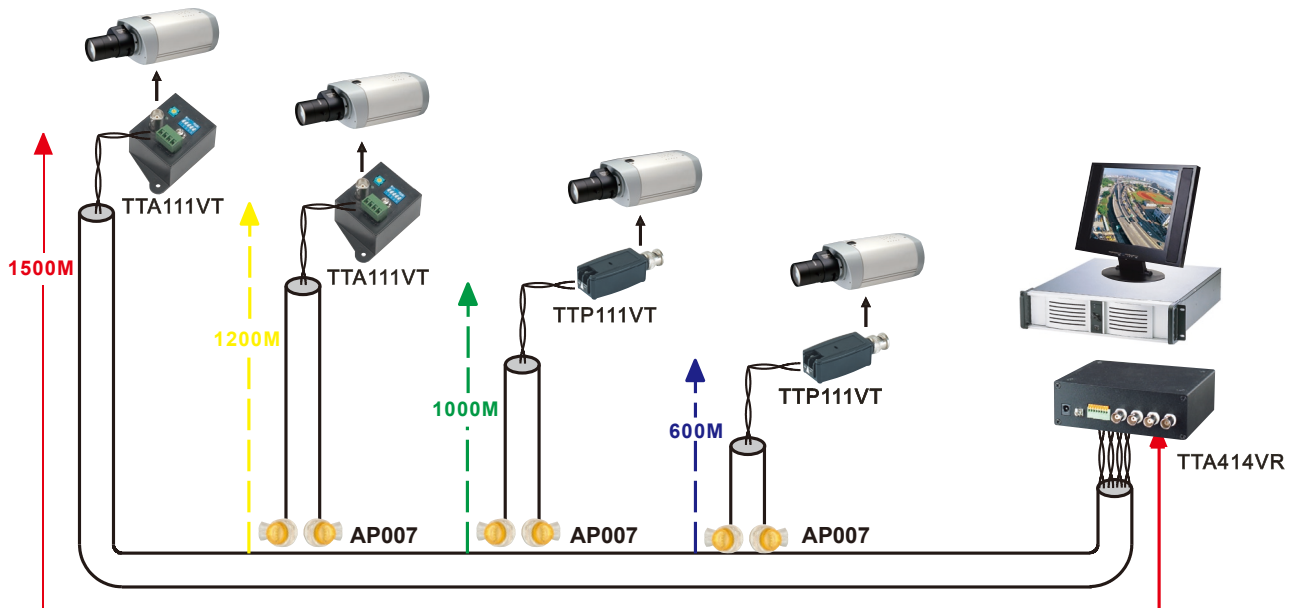


## Speed Dome Camera Application



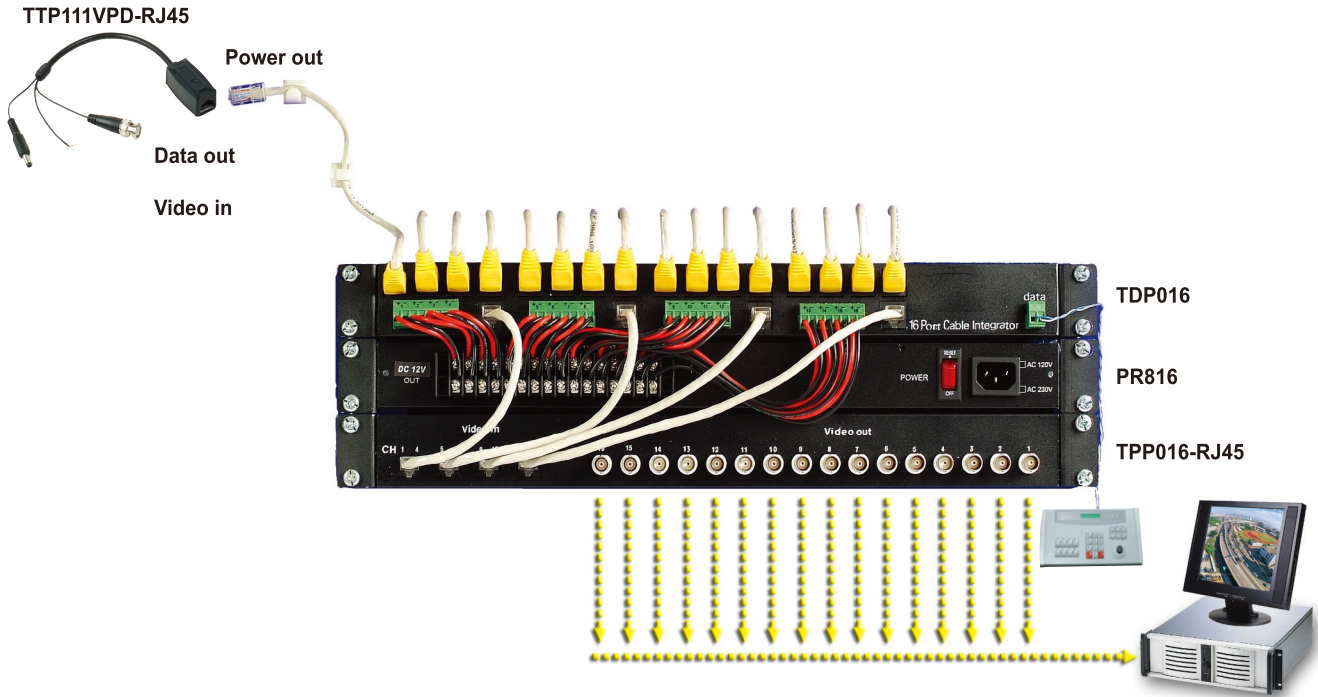
Using TTA111AV could transmit video, audio, 2 data signal, range up to 1.5KM (Color), 2.4Km (B/W)

## One Cable For Variety Range Application



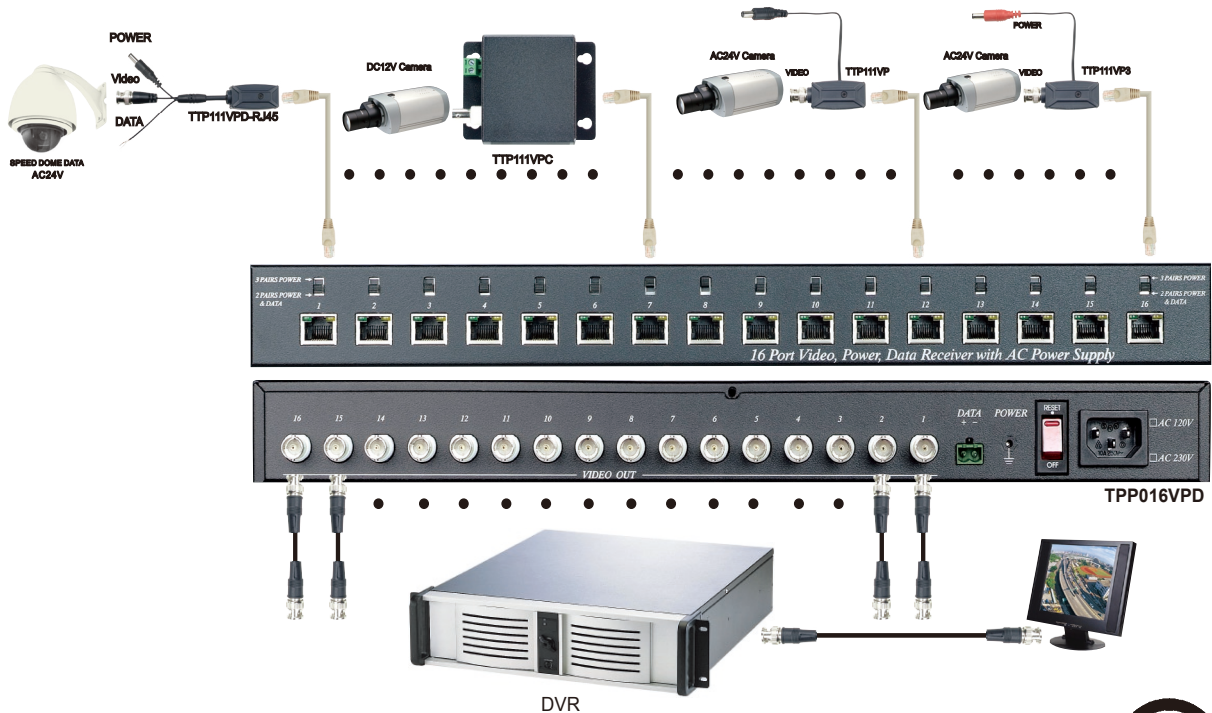
Passive or active video transceiver for series connection to use one CAT5 4 pairs cable, transmit 4 video signals for different range.

## Professional Cable Integrator



16 port cable integrator, to carry Video, Power, Data over CAT 5 & RJ45 connectors.

## 16 Channel Video Power Data UTP Hub with AC Power Supply

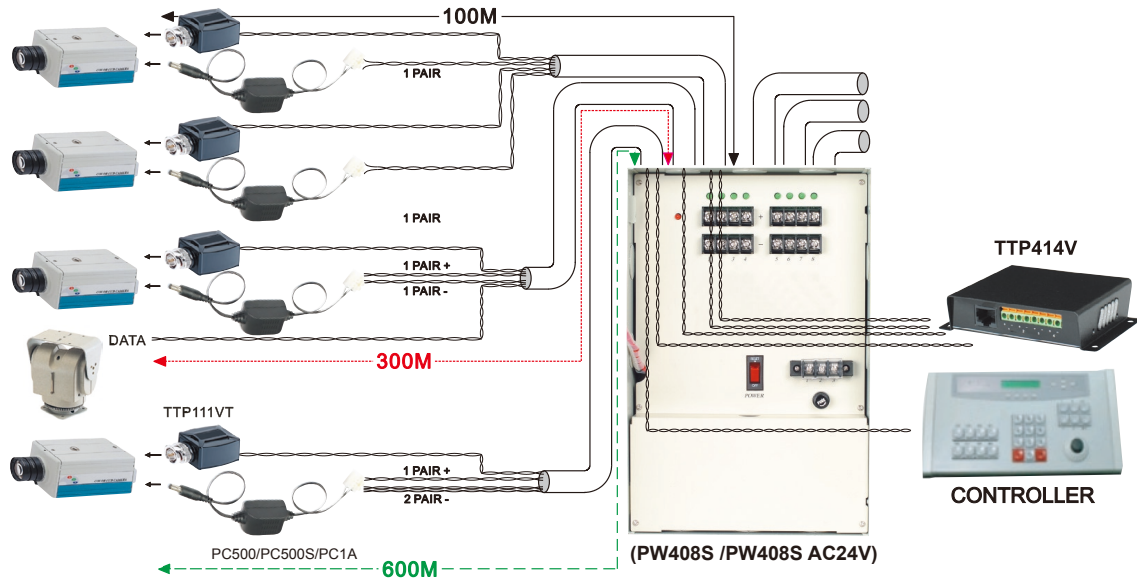


Professional CCTV UTP hub integrate and send video, power, data over 4 pairs CAT5 cable up to 300 meters. Perfect cable management solution from the camera to the wiring station, control room.



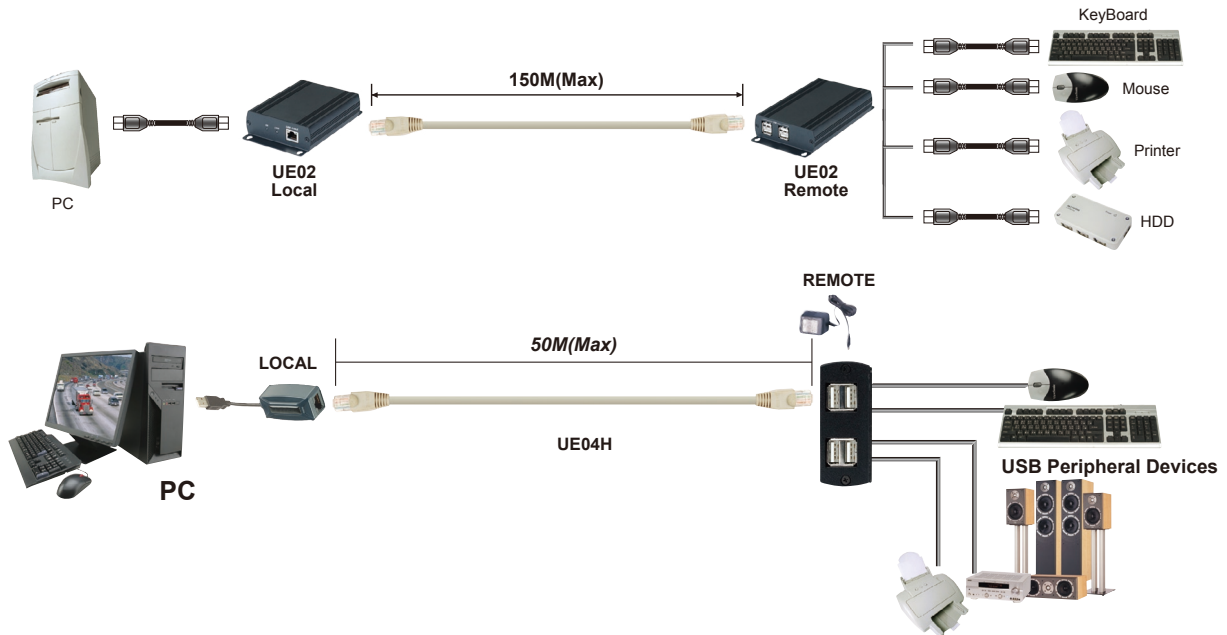
# Application Guide

## Video, Power, Data Transmission Application



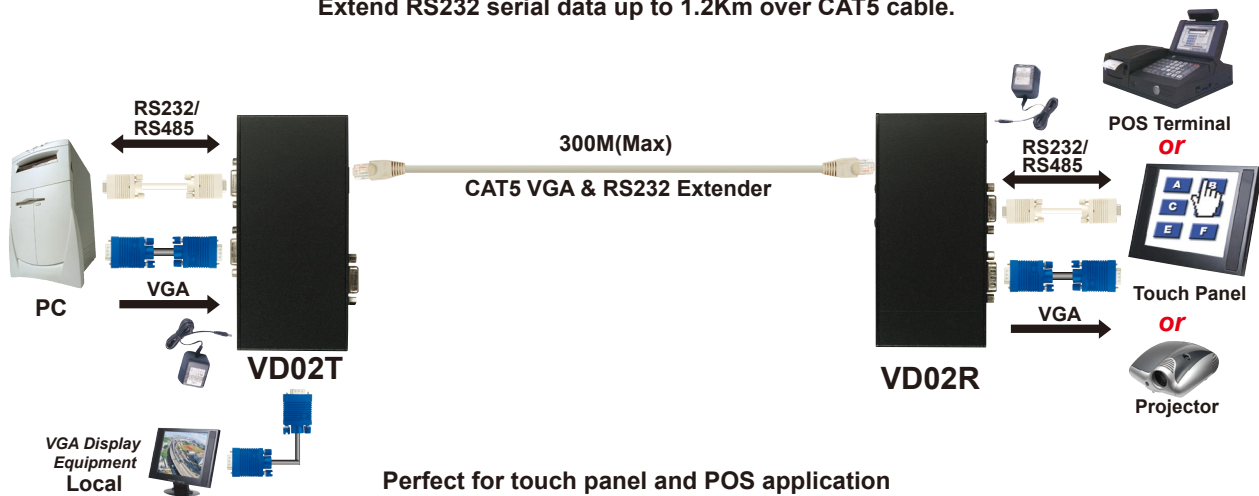
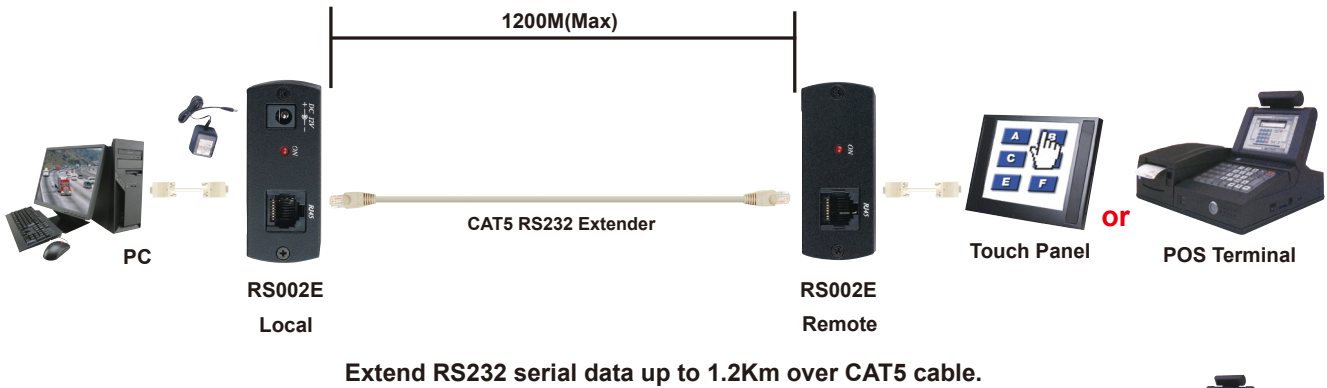
Using CAT 5 cable to transmit Video, Power, Data Signal for best & professional cabling management.

## USB CAT5 Extender

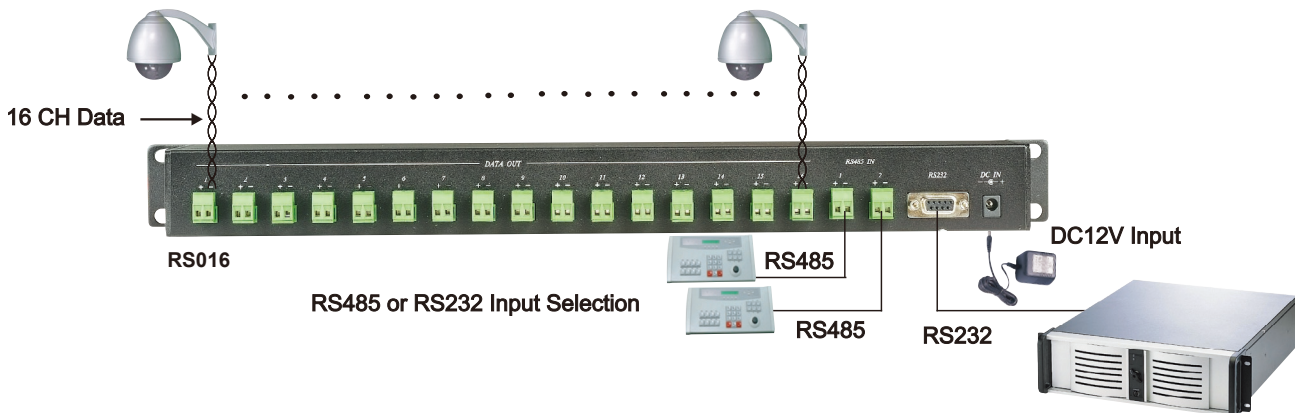


Application for extend USB 1.1 / USB 2.0 devices (Keyboard, mouse, IP camera, printer...) up to long range 50 meters/150meters over CAT5 cable.

## Data Repeater, Extender

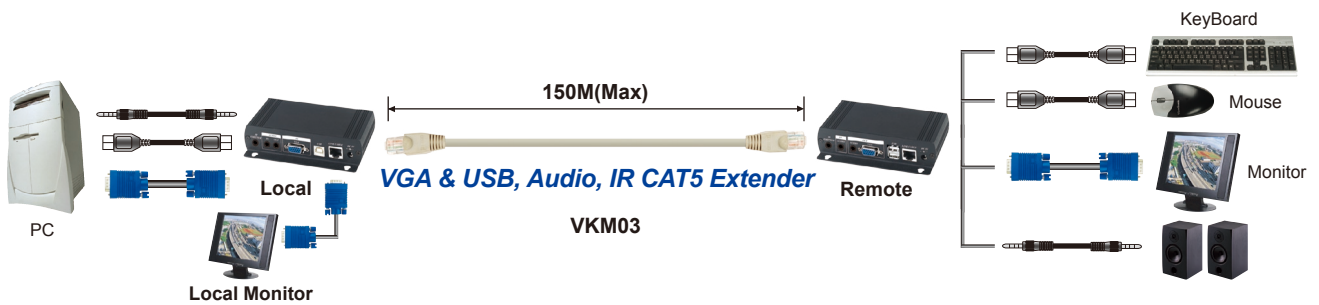
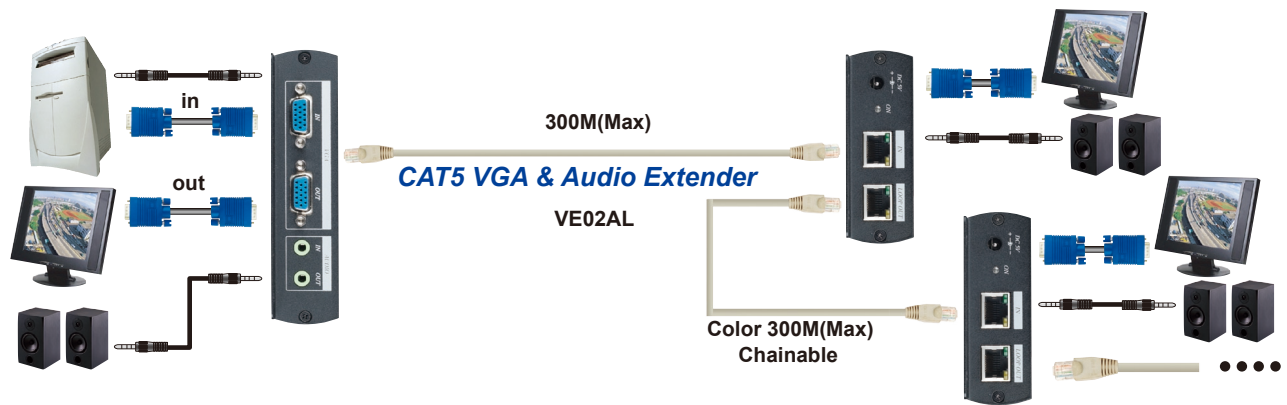
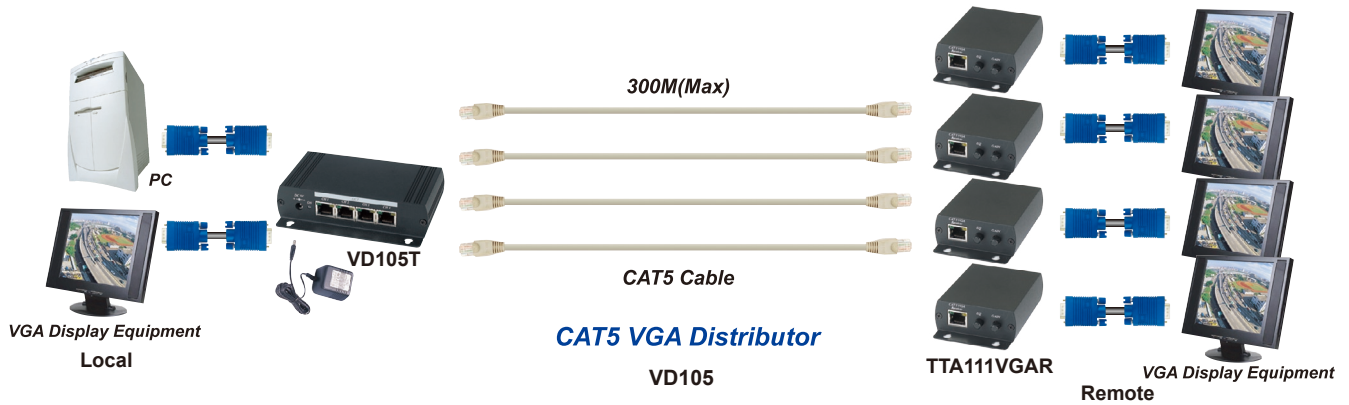
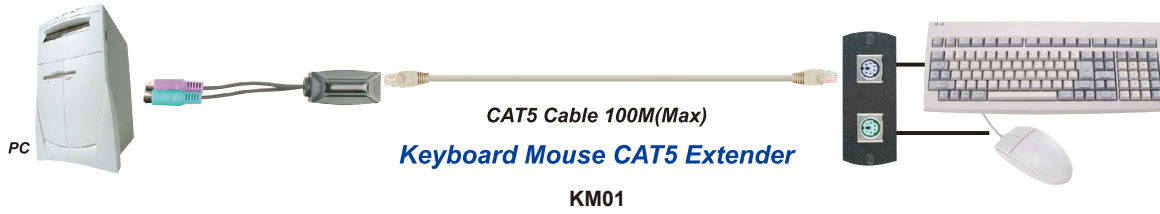


## RS485 Data Distributor

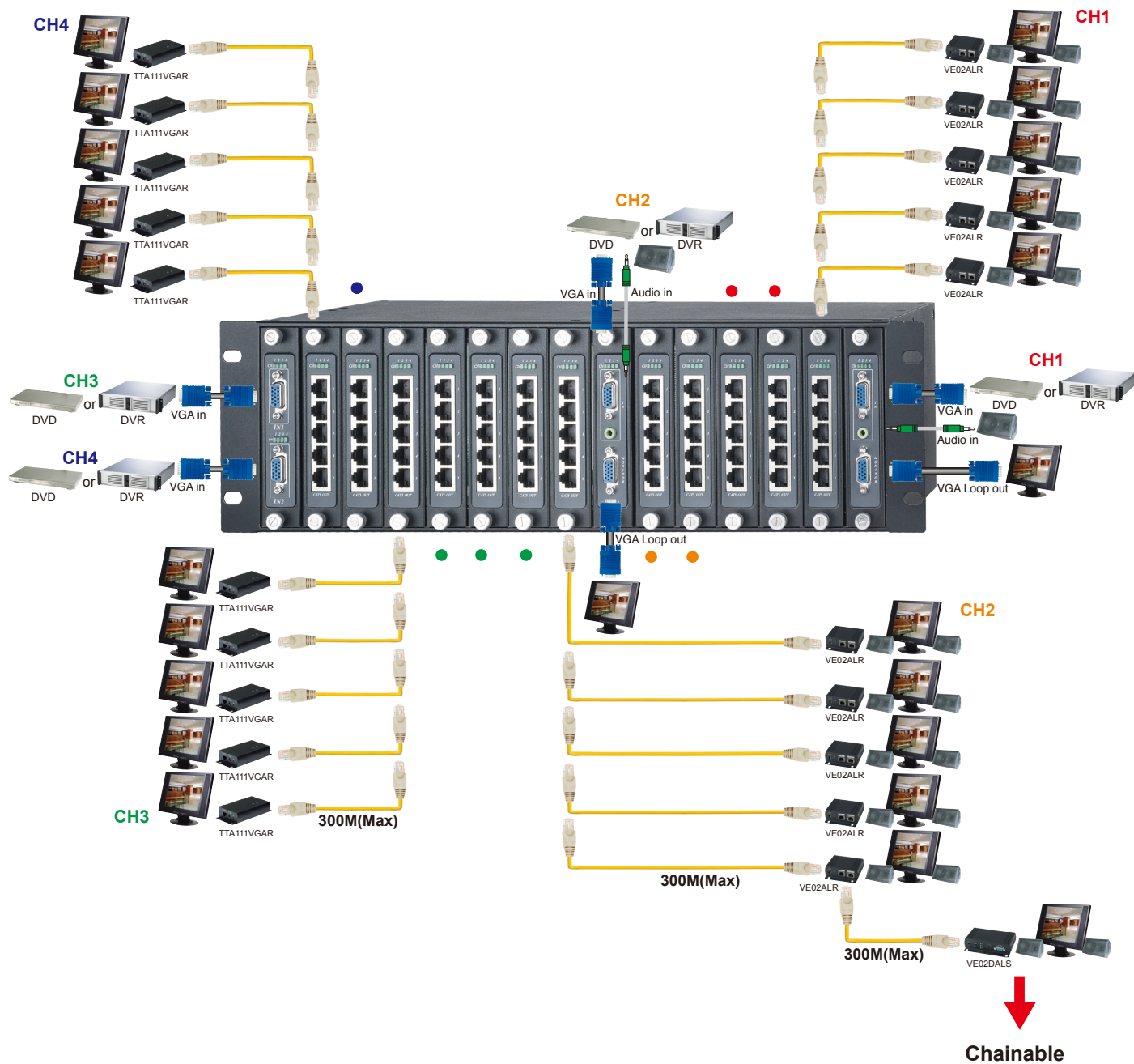


Perfect for multi speed dome data application, each channel up to 1200 meters ( Max.)

## CAT5 VGA Transmission



## Professional VGA & Audio CAT5 Distribution System-Multi input/output

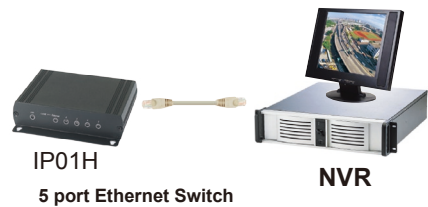


Allow multi VGA & Audio inputs for multi outputs over cost effective CAT5 cable, perfect for used in shopping malls, public address systems, airports, train and bus station, boarding rooms, trades shows, computer based training and many more applications.

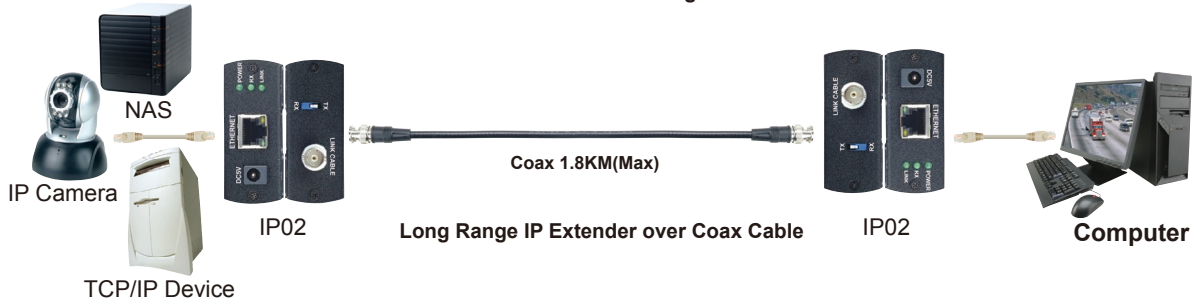
## IP Cabling Solution



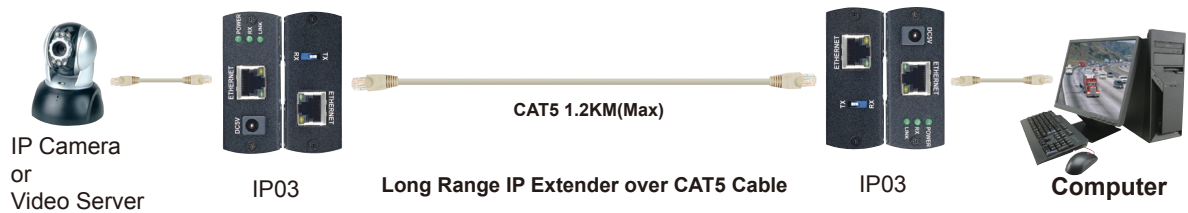
Passive IP Extender over Coax Cabling



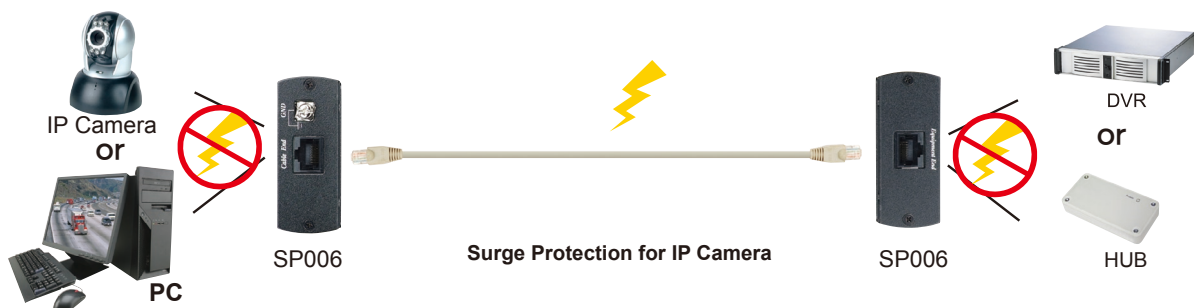
4 IP Cameras over Coax Cabling Solution

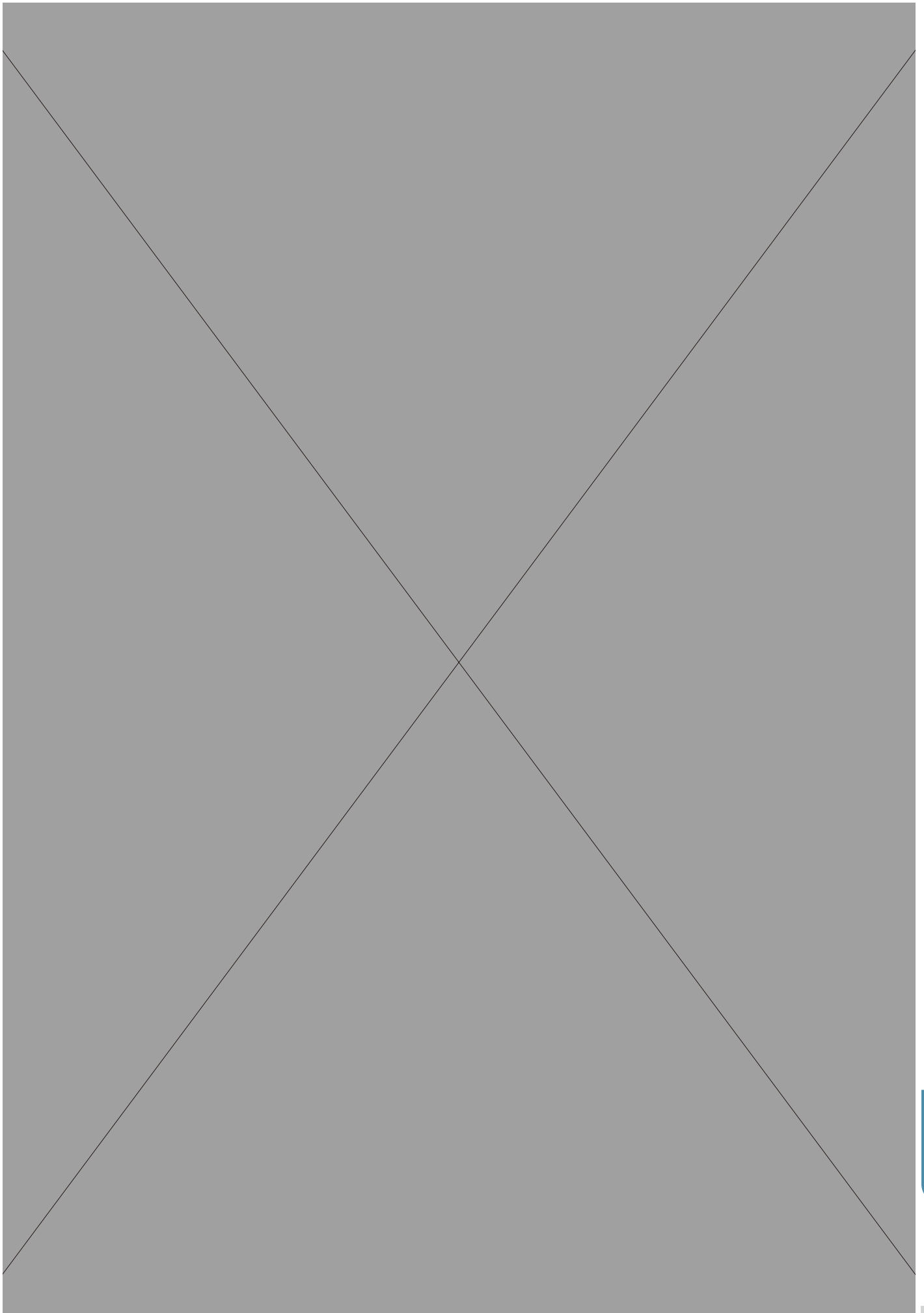


Long Range IP Extender over Coax Cable



Long Range IP Extender over CAT5 Cable







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Tel: 416- 512-6288 Toll: 1-888-GO2-CCTV Fax: 416- 225-2889  
[www.foresight-cctv.com](http://www.foresight-cctv.com) [www.smarthomecabling.com](http://www.smarthomecabling.com)  
[sales@foresight-cctv.com](mailto:sales@foresight-cctv.com)