### IP/PoE CABLING TRANSMISSION

#### ITEM NO.: IPO3P PoE Extender over Coax/Two Wire



IPO3P PoE Extender is designed to send and extend Ethernet network with PoE can be established using existing cables up to 600M. You can use Coax cable either any two-wire cables (UTP cable, telephone line, antenna cable, or bell wire) that is no longer in use to connect a 10/100Mbps PoE device, IP telephone, PC...etc without having to lay any new cables. Extended pass through PoE to allow a single PoE source, such as a PoE network switch (IEEE 802.3af/at) to provide power to both TX/RX and the IP/PoE camera use. It is perfect solution for extended distance data and power transmission for warehouses, parking lots, campuses, casinos and many more.

#### IPO3P PoE Extender over Coax/Two Wire

- Extend POE signal up to 600M, Ethernet or any TCP/IP devices up to 1000M.
- Ethernet and PoE data over coax or any two wire cables (UTP, telephone, bell, alarm, power cables.
- Support 10/100 Mbps transmission rate.
- Power source either from PoE Switch or external DC power adapter option. (order separately)
- Provides pass-through PoE up to IEEE802.3at 30W.
- Provides DC12V 1Amp power to camera.
- Support high power PoE to PTZ cameras at long distances.
- IP03P Power Source Option Model:

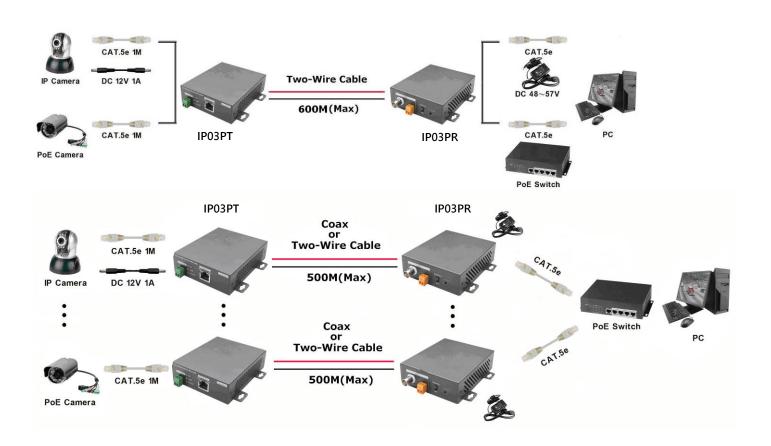
DC48V 40W power adapter: SWP480830 DC56V 70W power adapter: SWP561600

High Power PoE Injector/ PoE Switch: IP061, IP06H

#### Installation View:

- 1. Connect IPO3PT, IPO3PR with any two wire cable at both ends before powering.
- 2. Power input source could use PoE Injector/Switch either optional DC 48V, DC56 power adapter to IP03PR unit and camera use.





# Different Two Wire Cables Distance Chart for Reference:

Please note the cable quality, length and diameter of two wires used all have an influence on the transfer of data and the PoE output.

CABLE	Distance	Power Input	Data Rate	PoE Output	DC 12V Output
Coax Cable RG59	500	PoE 54V	71.2Mbps	11.8~12.4W	1000mA
		DC 55.5V	71.2Mbps	12.8~13.5W	1000mA
		DC 48V	71.2Mbps	8.7~9.2W	1000mA
	1000	DC 55.5V	56Mbps	N/A	N/A
		DC 48V	47.5Mbps	N/A	N/A
	1500	PoE 54V	40Mbps	N/A	N/A
		DC 55.5V	48Mbps	N/A	N/A

CABLE	Distance	Power Input	Data Rate	PoE Output	DC 12V Output
Coax		PoE 54V	70.5Mbps	11.8~12.4W	1000mA
Cable	600	DC 55.5V	73Mbps	8.7~9.2W	1000mA
RG6U		DC 48V	72Mbps	8.2~8.7W	1000mA

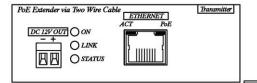
CABLE	Distance	Power Input	Data Rate	PoE Output	DC 12V Output
CAT.5e Cable 4 Pairs	600	PoE 54V	59Mbps	13W	900mA
		DC 55.5V	68Mbps	16.5~17.5W	1000mA
		DC 48V	60Mbps	13W	900mA
	1000	PoE 54V	41Mbps	N/A	N/A
		DC 55.5V	44Mbps	N/A	N/A
		DC 48V	42.5Mbps	N/A	N/A

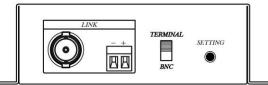
CABLE	Distance	Power Input	Data Rate	PoE Output	DC 12V Output
Telephone Cable 0.65mm	200	PoE 54V	68Mbps	12W	900mA
		DC 55.5V	80Mbps	18.5~19.5W	1000mA
		DC 48V	73Mbps	12W	900mA
	400	PoE 54V	68Mbps	W8	700mA
		DC 55.5V	80Mbps	11W	850mA
		DC 48V	73Mbps	4.8~5.4W	500mA

※ Recommend external power adapter must use DC 48~57V 30W.

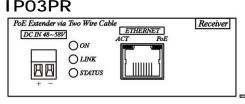
# Panel View:

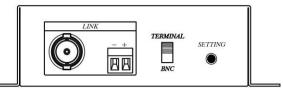
### IP03PT





#### IP03PR

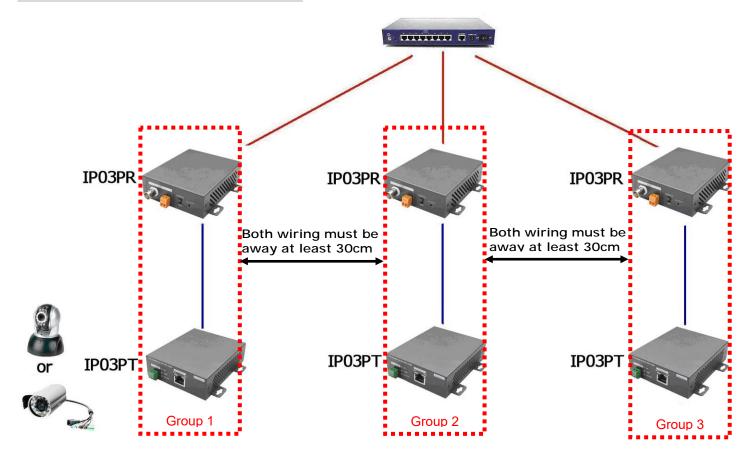




# **LED Indication:**

LED Indication	Status	Function
ON	Green On	Power on
LINK	Blue On	Linked
STATUS	Red On	Link failed
RJ45	Green Flash	Data transmission
(Green/Orange) Orange On		POE transmission

### **SETTING Button Function:**



### Use SETTING button to setup a group:

When IPO3P need to create a group, please follow the following steps:

- 1. Connect IP03PR and IP03PT first then press the SETTING button 5~8 seconds of IP03PR , the blue LED will be off, green LED will be on.
- 2. IP03PR Press the SETTING button 1~3 seconds then release, the RJ45 Green LED will be flashing.
- 3. Within one minute to press 1~3 seconds and release unit of IPO3PT SETTTING button, you will see the IPO3PT and IPO3PR RJ45 Green LED under linking.
- 4. After complete the above steps, the blue/green LED become ON status that mean the group has successfully established.

# Reset to factory Default:

To press the SETTING button 10 seconds, then release, the RJ45 green LED will be off and on again, orange LED will be off.

#### Slide Switch Function:

BNC Use coax cable to send data and power TERMINAL Use two wire cables to send data and power

\* Make sure the IP03TX/IP03RX both setting at same position of BNC/TERMINAL.

### **Terminal Function:**

IP03PR

Orange: Output DC48-DC58V & data transmission

Black: Input DC48-DC58V

IP03PT

Green: Output DC12V 1AMP (output power will be affected by the power cable thickness)
FORESIGHT CCTV INC 15863 Leslie Street. Unit #713. Toronto Ontario Canada M2H L18 | http://www.foresight-cctv.com | 1-888-GO2-CCTV
Orange: Receive IPO3PR two wire power and data transmission.

### Recommend cable:

RG59/6U COAX cable, CAT5e/6/7 UTP cable, telephone cable, power cable.

Please note the cable quality, length and diameter of two wires used all have an influence on the transfer of data and the PoE output.

### Cable Define:

Data/Power +

Data/Power -

### Caution:

1. Power output will be varied based on the power source input.

IPO3PR power input with two selections, but one time only could use one input

★ Once choose power adapter power input, it cannot accept PoE devices input.

IPO3PT power output with two selections, but one time only could use one method.

- ★ Once choose DC 12V 1A power output, it cannot use PoE output power supply.
- 2. The linking Coax cable or two wire cable all carried with power, using two wire installations, please pay attention the wiring polarity to avoid any damage.
- 3. IP03PT DC12V 1Amp output: the power output will be affected by the power cable thickness.
- 4. The power consumption of the product itself on IPO3PT/IPO3PR is 5.5W.
- 5. If use PoE injector/switch as power input source, recommend to use high power PoE IEEE802.3at in order to provide enough power to PoE devices or DC12V output.
- 6. The wiring must away from any equipment with electromagnetic wave in order to avoid transmission distance become shorter, i.e.: mobile phone, microwave, radio equipment, fluorescent lamp, power lines.

### Package:

IPO3PT x 1

IP03PR x 1

Screw Pack x 2

Rubber Pad x 2

# Specifications:

ITEM NO.	IP03PT	IP03PR		
RJ45 Interface	Data Transmission/ POE Output	Data Transmission/POE Input		
Power, Data Input /Output	Slide switch: BNC or terminal block			
Distance	Ethernet: 1000 Meters, PoE: 60	Ethernet: 1000 Meters, PoE: 600 Meters (Max) based on cables		
Power Input	Terminal Block orange color x1	Terminal Block black color x1		
Input Voltage	PoE injector/Switch 802.3at/af PoE or DC 48V/DC56V power adapter			
Power output	Terminal Block green color x1	Terminal Block orange color x1		
Output Voltage	X	DC12V		
LED Indication	Power, POE, Ethernet, Status			
Protection	ESD Protection: 30KV, 1KA @ 8/20us			
Data Rate (Max)	Uplink: 70Mbps , Downlink: 71Mbps	Uplink: 71Mbps, Downlink: 70Mbps		
Power Consumption	2.5W	3W		
Temperature	Operation: -10 to 65°C, Storage:	-20 to $70^\circ\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$		
Dimension mm	109.6 x 131.5 x 30	109.6x131.8x30		
Weight g	280			