## IP CABLING TRANSMISSION – POE Repeater

ITEM NO.: IP04



IP04 is a POE repeater to extender power and data an additional 100meters. A maximum range of 600meters is possible by using multiple repeaters, eliminating the need for additional switches, hubs and expensive fiber installations. It compliant with standard POE IEEE802.3af.

## **IP04 POE** Repeater

- Extend of both power and data beyond 100 meters.
- Extend range 100 meters each, maximum range up to 600 meters by multiple repeaters.
- 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.

#### Installation View:

#### **Quick Installation:**

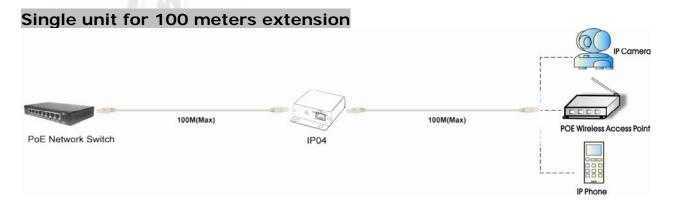
- Connect the POE IN connector to a POE Source (such as a POE network switch), the power LED will be on and link speed LED will start blinking.
- Connect the POE OUT connector to a POE powered device ( such as an IP camera), the link speed LED will start blinking. If POE equipment provided by normal power, the POE equipment power LED will be on.

### LED Indication for Link Speed:

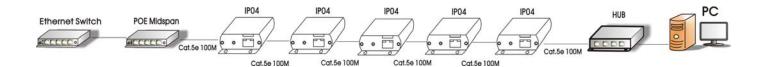
10BASE-T: Yellow

100BASE-T: Yellow, Green

1000BASE-T: Green



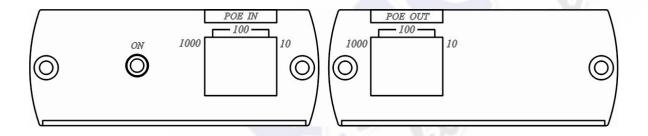
## Multiple units for long distance



# IP04 itself provide data and power 100 meters, the power will drop as below by multi POE repeaters and long cable length application:

Max Device	CLASS 3		CLASS 2		CLASS 1		
Power	MAX	MIN	MAX	MIN	MAX	MIN	
	12.95W	6.5W	6.5W	3.8W	3.8W	0.5W	0W
Range with POE switch	0m		300m		400m		600m

#### **Panel View:**



## Troubleshooting:

- 1. IP04 both end equipment must be at same link speed, 10BASE-T must work with 10BASE-T equipment, 100BASE-T must work with 100BASE-T equipment of equipment at different speed, then the data won't be able to send out.
- 2. The cable of quality will affect the transmission range based on POE equipment at 1000 BASE-T. If POE repeater auto setup to 100 BASE-T, then reduce the cable length or change for better quality cable (CAT6 cable recommended).
- 3.. The power consumption is bigger based on 1000 BASE-T transmission, to use multi POE repeaters will be less to 2 units (The power consumption of POE equipment must under 7W)
- 4 .IPO4 power consumption is 2.2W (1000BASE-T is 5W), if your POE device power consumption is over 10.5W (1000BASE-T is 7.5W) will cause IPO4 shut down and it will be auto re-boot after a few seconds.
- 5. The maximum distances above are typical for installations using 24AWG CAT5 cable or better. Actual limits depend on cable quality and POE device characteristics.

## Specification:

ITEM NO.	IP04			
Power & Data Input	RJ-45			
Power & Data Output	RJ-45			
Data Link	Pins 1, 2, 3, 4,5,6,7,8			
Power Link	Pins 4, 5, 7, 8			
Transmission Range	100 Meters			
LED Indication	Power: blue, Link Speed: yellow, green			
POE	IEEE 802.3af Standard, 48V \ 400mA \ 12.95W			
Power Consumption	2.2W (Max.) based on 10/100 BASE-T 5W(Max.) based on 1000 BASE-T			
Temperature	Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%			
Dimensions W x H x D mm	130×67×27 mm			
Weight g	170g			

