

IPC-600PF (sold as a pair)

LONG RANGE PoE EXTENDER OVER TWISTED PAIR



IPC-600PF-T



IPC-600PF-R

The **IPC-600PF-T/R** and **IPC-600PF -T/R** is an **IP long-haul** transmitter/receiver. It provides high speed connection, large throughput, and PoE over long distances on twisted pair. By using this product, the data of IP end device such as IP camera can be transmitted back to head end either through existed Phone Line cable or a newly deployed one. In addition, the receiver also has **PoE output** to power the IP end device. The ability to transmit IP signal and power over **400m**, makes this an ideal solution for customers that used twisted pair for their analog installation years ago, and now want to convert to IP, and avoid the cost of labor and wire.

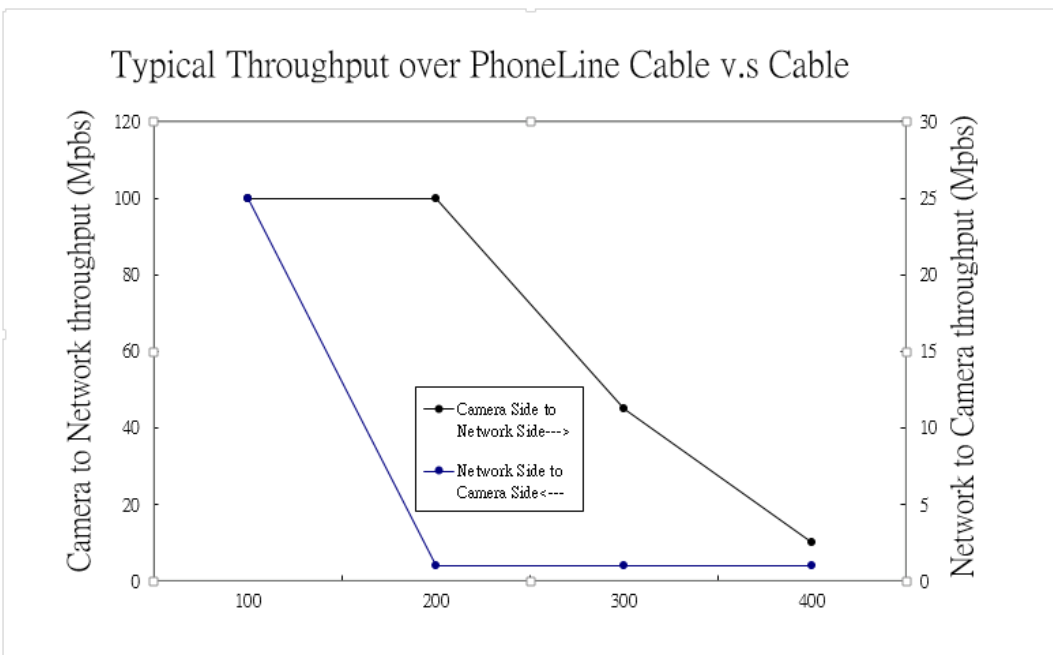
Specifications: Note: All wire tests were conducted on single wire runs. Splices, punchdowns, and other potential defects in wiring will impact distance and performance.

Parameter		Transmitter (Network Side)	Receiver (Camera Side)	Note
Model Number		IPC-600PF-T	IPC-600PF-R	
Interface	Ethernet	1 RJ45 Power + Data (PoE In)	1 RJ45 Power + Data (PoE Out)	
	Phone Line	1 Terminal, Power + Data	1 Terminal,, Power + Data	
	DC Input	1 DC Jack, 2.1mm * 5.5mm	1 DC Jack , 2.1mm * 5.5mm	Note1.
Transmission speed		100 Mbps throughput		
100Mbps Transmission Distance		0~200 m @ 0.5mm Twisted Pair Phone Line cable		Ref. Cable Loss: 24dB @ 12MHz 35dB @ 44MHz
Maximum Transmission		>400 m @ 0.5mm Twisted Pair Phone Line cable		Ref. Cable Loss: >48dB @ 12MHz >70dB @ 44MHz
Dimension (W x D x H mm)		90mm * 42mm * 22mm	80mm * 42mm * 22mm	Without Connector

Ethernet interface	10/100 BASE-T one port		
Phone Line interface	Terminal	Terminal	
Operating Temperature	0~60 degree C	-10~60 degree C	
Operating Humidity	10%~90%		
PoE output Power	--	30W (max)	
Power In	48~56V	44~56V	Power adapter (120 V / 60Hz to 56V DC)
Power consumption	3W	2.6W	Typical power

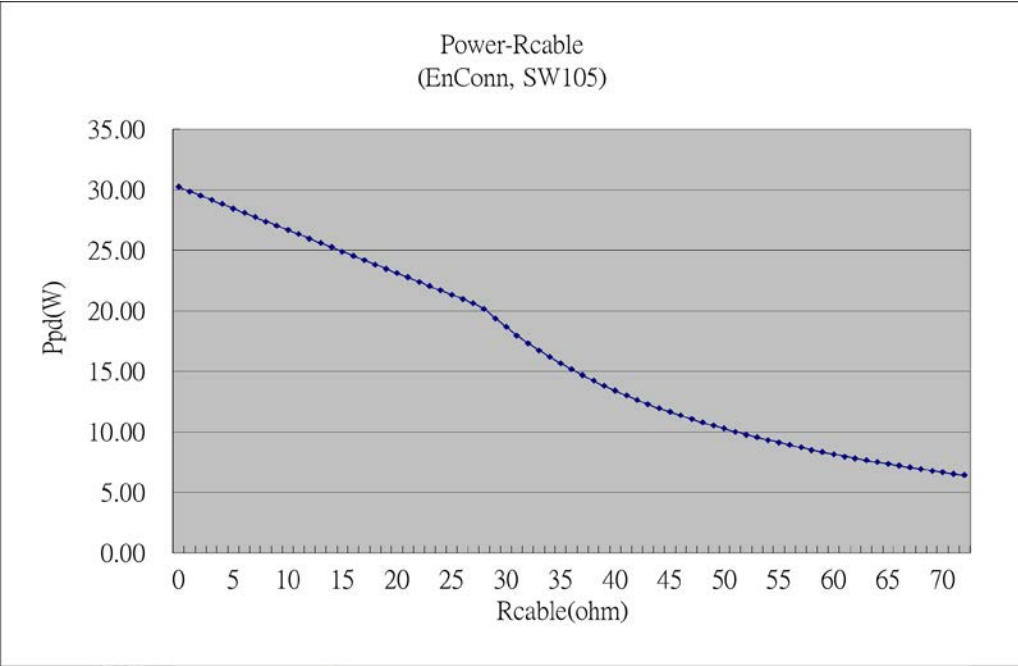
Note1: Local power using in TX when user has no PoE switch or PoE injector.

Throughput:

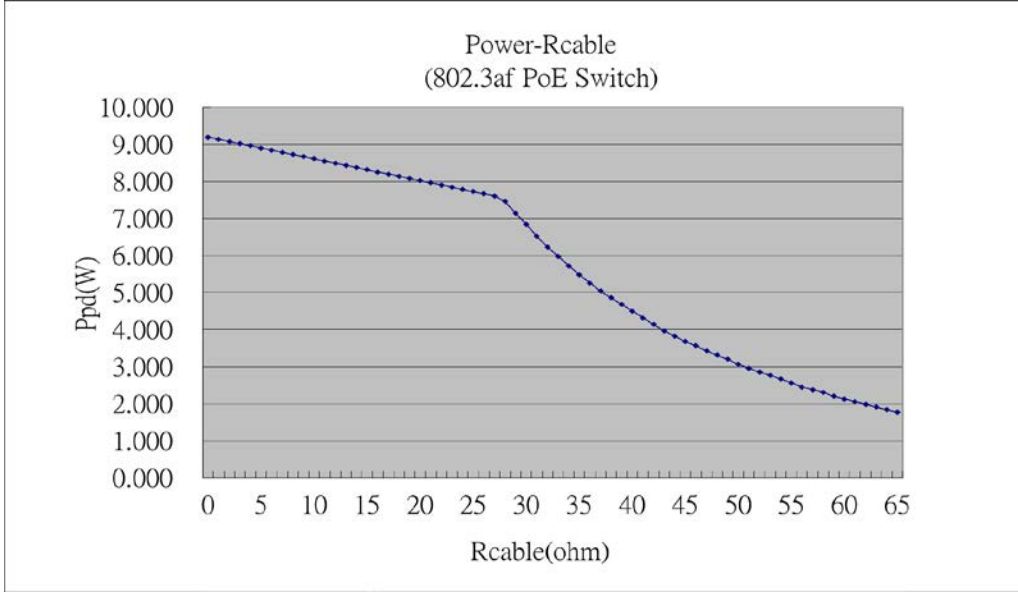


Maximum Power at Camera side v.s. Total Cable dc Resistance:

- a. Powered by CamBridge SW105 with 802.3 at mode 39W/56V from SW105 port. Connection path: PoE SW → IPC-600PF-T → Coax → IPC-600PF-R → IP Cam: (Graph next page)



- b. Powered by commercial 802.3af switch
 15.4W/48V from switch port. Connection path:
 PoE SW → IPC-600PF-T → Coax → IPC-600PF-R → IP Cam:



- Notes:
1. Phone Line Cable DC Resistance = 1 Line DC Resistance of Cable * 2
 2. Typically, regular resistance of 0.5mm Phone Line is 20 ohm/100m.
 3. DC Cable Resistance should include Lan UTP Cable, 10ohm/100M (for standard POE interface, cat 5E)
 4. EnConn’s SW105 can provide maximal capability of 56V/0.7A per port, but the maximal total power will be limited by used power adaptor.

Need to run POE and video data over a single pair of wires? You can connect up to 4 cameras on a single Cat 5 cable



Configuration Examples

PoE Powered solution:



External power supply with non-PoE switch solution:



Camera side External power -POE solution:



4 cameras on 1 Ethernet cable:

