





# **PoE / Ethernet Extender =**

### **Features**

- 3 Gigabit Ports, Easy Plug and Play Operation
- Extends the range of PoE and Ethernet an additional 100 meters or more
- Compatible with IEEE802.3af and IEEE802.3at and IEEE802.3at 4 Pair (60W)
- No Additional Power Supply is Required
- Built-in Surge Protection
- Automatic MDI/MDI-X Crossover
- Automatic Speed and Duplex Sensing
- Low Self Power and High Temperature Operation
- CE and FCC Certification
- Compact Desktop or Wall Mount Design and Compatible with DIN Rail Adapters

### **Applications**

- Add another PoE and Data Port without running more Ethernet Cable
- Extend Ethernet and PoE an additional 100 meters per each TP-SW3G

## Description

The TP-SW3G Power Over Ethernet (PoE) 3 Port Gigabit switches offered by Tycon Systems are fully automatic high speed Ethernet switches with up to 30W of PoE power per port.

The unit accepts Gigabit data and power via PoE into the RJ45 "PoE In" port. The PoE In port is compatible with IEEE802.3af, IEEE802.3at and IEEE802.3at 4 pair (60W). It can also accept 42-57VDC Passive PoE.

There are two fully compliant 802.3af/at Gigabit "PoE Out" ports. These ports are capable of up to 30W per port and 100m (330ft) distance.

Multiple TP-SW3G can be strung together to provide effective distances up to about 300m depending on loads. No extra power is required as the units are powered over PoE.

The units are compatible with Category 5 or higher Ethernet cables. The RJ45 connectors are shielded and grounded to the case. The units have 15kV surge protection on all Ethernet wires and are conformal coated for moisture protection. They have a wide operating temperature range for outdoor and industrial applications.

RJ-45 PoE In (Data & Power)			RJ-45 PoE Out (Data & Power)	
Pin	Symbol	Description	Symbol	Description
1	A+ / +Vdc	Data A+ / DC Power(-)	A+/-Vdc	Data A+ / DC Power(-)
2	A- / +Vdc	Data A- / DC Power(-)	A-/-Vdc	Data A- / DC Power(-)
3	B+/-Vdc	Data B+ / DC Power(+)	B+/+Vdc	Data B+ / DC Power(+)
4	C+ / +Vdc	Data C+ / DC power(+)	C+	Data C+
5	C-/+Vdc	Data C- / DC power(+)	C-	Data C-
6	B- / -Vdc	Data B- / DC Power(+)	B- / +Vdc	Data B- / DC Power(+)
7	D+/-Vdc	Data D+ / DC power(-)	D+	Data D+
8	D-/-Vdc	Data D- / DC power(-)	D-/	Data D-

#### **TP-SW3G** Pinout



## **Specifications**

	TP-SW3G		
Ports	1 data/PoE input and 2 data/PoE outputs, automatic crossover and polarity		
Transmission Speed	1000 Mbps (Gigabit) / 100 Mbps /10 Mbps Auto-negotiation		
Connections	Shielded RJ45, Grounded to case		
PoE Input Port	Vin 44VDC to 57VDC, PoE Pinout: 1,2(V-); 3,6(V+) and/or 7,8(V-); 4,5(V+)		
PoE Output Ports	Vout 42VDC to 55VDC, Pin assignment: V-(1,2), V+(3,6)		
PoE Output Power	30W per port Maximum, 60W Total		
POE Compatibility	IEEE802.3af (PoE), IEEE802.3at (PoE+), 802.3at 4 Pairs (60W) High PoE		
POE Protections	Over Temperature, Over Current, Short Circuit		
Surge Protection	IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC61000-4-4 (EFT) 40A (5/50ns)		
Self Consumption	< 1.5 Watt Typical		
LED's	Link (Green On), Activity (Green Blinking), PoE Detect (Yellow On)		
Switch Technology	Store and Forward		
Protocol	CSMA/CD		
Flow Control	IEEE802.3x(full-duplex), Back Pressure(half-duplex)		
Data Transmission Rate	148800pps ,14880pps		
Address Table	1K MAC, self-learning		
Operating Temp	-30 to +60°C (-22 to 140°F)		
<b>Operating Humidity (RH)</b>	5% - 90% (non condensing)		
Storage Temperature	-40 to +85°C (-40 to +185°F)		
Dimensions (LxWxH)	119 x 85 x 28mm (4.7 x 3.3 x 1.1")		
Weight	280g (9.9oz)		
Warranty	2 Years		

## **Typical Application:**



#### System Ordering:

3 Port 802.3af/at Gigabit PoE Switch – PoE / Ethernet Extender

#### For further information contact:





TP-SW3G