





## **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 IEEE802.3bt 4 Pair (90W)
- 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
- Compact Desktop or Wall Mount Design and Includes DIN Rail Adapters



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

## **Description**

The TP-SW3G-WT Power over Ethernet (PoE) 3 Port Gigabit switches offered by Tycon® are fully automatic high speed Ethernet switches with up to 35W of PoE power per port.

The unit accepts power via a 12AWG wire terminal and/or via PoE into the Uplink port. The Uplink port accepts Gigabit data and PoE power. The Uplink port is compatible with IEEE802.3af, IEEE802.3at and IEEE802.3bt 4 pair (90W). It can also accept 44-57VDC Passive PoE.

There are two fully compliant 802.3af/at Gigabit "PoE Out" ports. These ports are capable of up to 35W per port and 100m (330ft) distance.

Multiple TP-SW3G-WT 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 FG Connection located on the wire terminal. The units have 15kV surge protection on all Ethernet wires. They have a wide operating temperature range for outdoor and industrial applications.

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

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



# **Specifications**

	TP-SW3G-WT		
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 FG		
Wire Terminal DC Input	Vin 44VDC to 57VDC, 2 connections for convenience, FG = Frame/Chassis Ground		
PoE Input Port (Uplink)	Vin 44VDC to 57VDC 90W, 2 Pair or 4 Pair +/- Power		
PoE Output Ports (1-2)	Vout 42VDC to 55VDC, Pin assignment: V+(4,5) V-(7,8)		
PoE Output Power (1-2)	35W per port Maximum, 70W Total		
POE Compatibility	Ports 1-2 = IEEE802.3af (PoE), IEEE802.3at (PoE+), Uplink Port = 802.3bt or POE++ or High PoE 4 Pairs (90W) or 2 pairs 802.3af/at or Passive 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	< 5 Watt Typical		
LED's	1000Mbps Link (Green On), Activity (Green Blinking) 10/100Mbps Link (Yellow On), Activity (Yellow Blinking) Port 1-2 PoE Detect (Yellow On) Uplink PoE Detect (Yellow On = 4 Pair Power) (Yellow Blinking = 2 Pair Power)		
Switch Technology	Store and Forward		
Protocol	CSMA/CD		
Flow Control	IEEE802.3x(full-duplex), Back Pressure(half-duplex)		
Data Transmission Rate	1488000pps , 148800pps, 14880pps		
Address Table	1K MAC, self-learning		
Operating Temp	-30 to +70°C (-22 to 140°F)		
Operating Humidity (RH)	5% - 90% (non condensing)		
Storage Temperature	-40 to +85°C (-40 to +185°F)		
Dimensions (LxWxH)	118 x 90 x 40mm (4.7 x 3.5 x 1.6")		
Weight	210g (7.4oz)		
Warranty	3 Years		





## System Ordering:

**TP-SW3G-WT** 3 Port 802.3af/at Gigabit PoE Switch – PoE / Ethernet Extender

For further information contact: Tyconsystems.com



