

### PoE 8 Port Switch

#### Features

- High Power 10/100Mb 8 Port PoE Switch
- Remotely Power Equipment thru CAT5 Cable up to 100m
- Extend Ethernet and POE up to 200m
- Up to 2A per Port
- Built-In Surge Protection
- Automatic MDI/MDI-X Crossover
- High Temperature Operation
- CE and FCC Certification

#### Applications

- Wireless Access Points and Client Devices
- IP Phone and Security Camera Systems
- Power multiple devices from 1 data cable



#### Description

The **TP-SW8-D** Power Over Ethernet 802.3af/at (PoE) 10/100Mb switch offered by Tycon Power Systems is a fully automatic high speed 8 port Ethernet switch. The **-NC** version is a passive PoE model for devices which are not 802.3af/at compliant. On the **-NC** version the PoE output voltage = the input voltage so it is universal in its application. The DC input power range can be from 12V to 57V. The units can be powered via 2 or 4 pair PoE to port 8 (2A max). TP-SW8-D has a 2 channel 802.3at input for 70W max PoE input. Both models supply power to the remote device on the unused Ethernet pins 4,5(V+) and 7,8(V-). The Ethernet spec supports distances up to 100m (328 feet) between the PoE switch and the remote device.

18V, 24V and 48V 60W, 120W and 180W power supplies are available. There are 2 power inputs for attachment of primary and backup power sources.

#### Device Pinouts

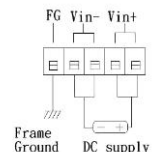
RJ-45 Port 8 (Data/PoE Input)			RJ-45 Port 1-7 (Data & PoE Out)	
Pin	Symbol	Description	Symbol	Description
1	RX+, V+, V-	Data Rx(+), PoE in	RX+	Data Receive(+)
2	RX-, V+, V-	Data Rx(-), PoE in	RX-	Data Receive(-)
3	TX+, V-, V+	Data Tx(+), PoE in	TX+	Data Transmit(+)
4	V+, V-	PoE in,	+Vdc	DC power(+)
5	V+, V-	PoE in	+Vdc	DC power(+)
6	TX-, V-, V+	Data Tx(-), PoE in	TX-	Data Transmit(-)
7	V-, V+	PoE in	-Vdc	DC power(-)
8	V-, V+	PoE in	-Vdc	DC power(-)

## Specifications

TP-SW8-D / -NC	
<b>Ethernet Standard</b>	IEEE802.3/IEEE802.3u (10 base-T/100base-T)
<b>POE Standard (Port 1-8)</b>	TP-SW8-D IEEE802.3af/at TP-SW8-NC Passive POE 12-57VDC
<b>Ports</b>	One data/PoE input and seven data/PoE outputs automatic crossover and polarity
<b>Transmission Speed</b>	100 Mbps(100base-T), 10 Mbps(10base-T) Auto-negotiation
<b>Switch Technology</b>	Store and Forward
<b>Protocol</b>	CSMA/CD
<b>Flow Control</b>	IEEE802.3x(full-duplex), Back Pressure(half-duplex)
<b>Data Transmission Rate</b>	148800pps for 100base-T, 14880pps for 10base-T
<b>Address Table</b>	2K MAC, self-learning
<b>Connections</b>	Shielded RJ45
<b>POE Port</b>	Port 1-7, auto power management Pin assignment: TX(1,2), RX(3,6), V+(4,5), V-(7,8) Port 1-8, 2A Per Port – NC Version
<b>Maximum POE Power</b>	Port 1-7(35W), 8 (70W) – 802.3af/at Version Wire Terminal or DIN Connector Input Max 10A
<b>POE Protection</b>	Over Temperature, Over Current, Over/Under Voltage
<b>Data Surge Protection</b>	IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC61000-4-4 (EFT) 40A (5/50ns) IEC61000-4-5 (Lightning) 20A (8/20µs)
<b>LED's</b>	Link (Green On, Yellow On) Activity (Green Blinking, Yellow Blinking ) PoE Input Detect-4 pair (Yellow On) PoE Input Detect-2 pair (Yellow Blinking) Power On (Green On) Power On Alarm (Red On)
<b>DC Power Input</b>	46V to 57V, 12V to 57V(-NC Version) Dual DC Inputs, Reverse Polarity Protected.
<b>Self Consumption</b>	<1.5 Watts
<b>Operating Temperature</b>	-40 to +85°C (-40 to 185°F)
<b>Operating Humidity (RH)</b>	5% - 90% (non condensing)
<b>Storage Temperature</b>	-55 to +105°C (-67 to +221°F)
<b>Dimensions (LxWxH)</b>	159 x 116 x 40mm (6.3 x 4.6 x 1.6")
<b>Weight</b>	0.45kg (1lb)
<b>Warranty</b>	1 Year

## LED STATUS INDICATORS

LED	STATUS	DESCRIPTION
Power	Green	LED ON if either power input (port 8 or wire terminal) has valid power applied
	Red	LED ON if the following condition happened. *Power input under voltage (Vin<12V) *Wire Terminal Power input over voltage (Vin>58V) *PoE over current (>2A)
	Off	No power in DC input
LED	STATUS	DESCRIPTION
P1-P8 Link/Act	Green	A network device is detected at 100Mbps, but no communication activity is detected.
	Green Blinking	This port is transmitting to, or receiving packet from another device at 100Mbps.
	Yellow	A network device is detected at 10Mbps, but no communication activity is detected.
	Yellow Blinking	This port is transmitting to, or receiving packet from another device at 10Mbps.
	Off	No device is detected.
LED	STATUS	DESCRIPTION
P1-P7 PoE PSE	Yellow	A valid Powered Device(PD) is detected and delivering power on this port.
	Off	No PD is detected on this port.
P8 PoE PD	Yellow	4 pairs power source received
	Yellow Blinking	2 pairs power source received
	Off	No PoE power detected on this port



## System Ordering:

- TP-SW8-D** 8 Port 802.3af/at compliant PoE Switch (no power supply included – requires 46-57V DC power source)
- TP-SW8-NC** 8 Port 12V-57V passive PoE Switch (no power supply included)

## For further information contact:

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