POE 5 Port Switch

Features

- **High Power 10/100 and 1000Mb ("G") POE Switch**
- **Remotely Power Equipment thru CAT5 Cable up to 100m**
- **Up to 2A per Port**
- **Built-in Surge Protection**
- **Automatic MDI/MDI-X Crossover**
- **Automatic Speed and Duplex Sensing**
- **1K Self Learning MAC Address Table**
- **Compact Size**
- **High Temperature Operation**
- **CE and FCC Certification**

TP-SSW5-NC

Applications

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

TP-SW5G-D (802.3af/at)
TP-SW5G-NC
TP-SW5G-24 (802.3af/at)

Description

The SW5 Series Power Over Ethernet (POE) switches offered by Tycon Power Systems are fully automatic high speed 5 port Ethernet switches with up to 2A of POE power per port. The switch comes in 4 models:

TP-SW5G-D: IEEE802.3af/at Compliant 48VDC 10/100/1000MB POE Switch. Switch accepts 48VDC power via a wire terminal connector on the back of the Switch or via 48VDC POE into the 802.3af/at compliant uplink port (90W max). 35W per port.
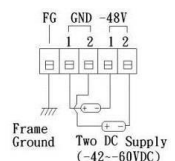
TP-SW5G-24: IEEE802.3af/at Compliant 48VDC 10/100/1000MB POE Switch. Switch accepts 12-36VDC power via a wire terminal connector on the back of the Switch or via 48VDC POE into the 802.3af/at compliant uplink port (90W max). Perfect for remote solar/battery systems. 35W per port.

TP-SW5G-NC: Universal Voltage 10/100/1000MB POE Switch. Switch accepts universal voltage (12-57VDC) via the wire terminal connector on the back of the switch. Also accepts 12-57VDC (1A max) Passive POE input on port 5. 1A per port.

TP-SSW5-NC: Universal Voltage 10/100 POE Switch. Switch accepts universal voltage (12-57VDC) via the wire terminal connector on the back of the Switch. This model is very compact at only 4"x5"x1.5". 2A per port.

On the universal voltage models ("-NC") the POE output voltage = the input voltage so it is universal in its application. The Ethernet spec supports distances up to 100m (328 feet) between the POE switch and the remote device. The Switches accept connections for up to two power supplies if additional power is required or if a backup power source is desired.

Tycon Power Systems sells a variety of power supplies in 60W, 120W and 180W sizes. 18VDC, 24VDC and 48VDC are available. All the Switches have DIN Rail mounts included for convenient DIN rail mounting.

Specifications

	TP-SSW5-NC	TP-SW5G-NC	TP-SW5G-D	TP-SW5G-24
Ethernet Standard	IEEE802.3/IEEE802.3u			
Ports	1 data/POE input and 4 data/POE, automatic crossover and polarity			
Transmission Speed	100 Mbps /10 Mbps Auto-negotiation	1000Mbps / 100 Mbps /10 Mbps Auto-negotiation		
Switch Technology	Store and Forward			
Protocol	CSMA/CD			
Flow Control	IEEE802.3x(full-duplex), Back Pressure(half-duplex)			
Data Transmission Rate	148800pps ,14880pps	1488000pps for 1000baseT, 148800pps for 100baseT, 14880pps for 10baseT		
Address Table	1K MAC, self-learning			
Connections	Shielded RJ45			
POE Output Ports	Port 1-4, auto power management		Pin assignment: TX(1,2), RX(3,6), V+(4,5), V-(7,8)	
Maximum POE Power	2A per port	1A per port	35W per port	Up to 35W per port; max 70W per 5 port switch
POE Auto Detection	Passive POE		IEEE 802.3af, 802.3at	
POE Protection	Over Temperature, Over Current, Over/Under Voltage			
Data Surge Protection	IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC61000-4-4 (EFT) 40A (5/50ns) IEC61000-4-5 (Lightning) 20A (8/20µs)			
LED's	*Link* (Green On), *Activity* (Green Blinking) *POE Detect* (Yellow On), *POE Detect Error* (Yellow Blinking) *Power On* (Green On), *Power On Alarm* (Red On)			
DC Power Input	*12V to 57VDC, Dual DC Inputs, Reverse Polarity Protected.*	*12V to 57VDC, Dual DC Inputs, Reverse Polarity Protected. Also Accepts POE power input on Port 5*	*48VDC (42V to 60V), Dual DC Inputs, Reverse Polarity Protected. Also Accepts POE power input on Port 5*	*24VDC (12V to 36V), Dual DC Inputs, Reverse Polarity Protected. Also Accepts POE power input on Port 5*
Self Consumption	< 1 Watt	< 3 Watts	< 3 Watts	< 4 Watts
Operating Temp	*-40 to +85°C (-40 to 185°F)*	*-20 to +75°C (-4 to 167°F)*	*-20 to +75°C (-4 to 167°F)*	
Operating Humidity (RH)	5% - 90% (non condensing)			
Storage Temperature	-55 to +105°C (-67 to +221°F)			
Dimensions (LxWxH)	90 x 118 x 40mm (3.5 x 4.6 x 1.6")	159 x 118 x 40mm (6.3 x 4.6 x 1.6")		
Weight	182g (6.7oz)	318g (11oz)		383g (13.5oz)

Device Pinouts – TP-SSW5-NC

RJ-45 Port 5 (Data Only)			RJ-45 Port 1-4 (Data & Power)	
Pin	Symbol	Description	Symbol	Description
1	RX+	Data Receive(+)	RX+	Data Receive(+)
2	RX-	Data Receive(-)	RX-	Data Receive(-)
3	TX+	Data Transmit(+)	TX+	Data Transmit(+)
4	NC	No Connection	+Vdc	DC power(+)
5	NC	No Connection	+Vdc	DC power(+)
6	TX-	Data Transmit(-)	TX-	Data Transmit(-)
7	NC	No Connection	-Vdc	DC power(-)
8	NC	No Connection	-Vdc	DC power(-)

TP-SW5G(-24), TP-SW5G-NC

RJ-45 Port 5 (Data & Power)			RJ-45 Port 1-4 (Data & Power)	
Pin	Symbol	Description	Symbol	Description
1	A+ / +Vdc	Data A+ / DC Power(+)	A+	Data A+
2	A- / +Vdc	Data A- / DC Powerr(+)	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(-)

System Ordering:

TP-SW5G-D 5 Port 802.3at/af Gigabit POE Switch (no power supply included – requires 42-57V DC source)

TP-SW5G-24 5 Port 802.3at/af Gigabit POE Switch with 12-36VDC input (no power supply included)

TP-SW5G-NC 5 Port 12V-56V Passive POE Gigabit POE Switch (no power supply included)

TP-SSW5-NC 5 Port 12V-56V Passive POE 10/100MB POE Switch (no power supply included)

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