

### Managed Industrial PoE++ Switch

#### Features

- Industrial Strength (-40C to +85C Operating Temperature)
- 10/100/1000 Gigabit Compatible Ethernet and 2.5G Fiber
- Two Configurations Available:
  - 4 PoE++ (802.3bt 90W) and 2 fiber (SFP) Ports
  - 2 PoE++(802.3bt 90W) and 6 PoE+(802.3at) and 2 fiber (SFP) Ports
- Manageable via Console Port or IP
- Surge Protected Voltage and Ethernet Inputs, Metal Shell
- Integrated DIN Rail Mount and Wall Mounts

#### Applications

- Outdoor Network Installations
- Cameras and Wireless Radios
- Factory networks

#### Description

The TP-SWxGBT-2SFP Power over Ethernet (PoE) 6 and 10 port Gigabit switches offered by Tycon® are fully automatic high speed Layer 2+ Ethernet manageable switches. The 6 port model has 4 GigE PoE++(90W) and 2 SFP 2.5G ports and the 10 port model has 2 GigE PoE++(90W) and 6 GigE PoE+(30W) and 2 SFP 2.5G ports. The PoE ports are manageable via the user interface. The maximum total power for all ports is an impressive 360W. They utilize industry standard 802.3at/bt detection for fully automatic operation.

The switch features security protocols like SSH and SSL for secure access of the switch command interface. The interface can be accessed via the serial console port or any of the Ethernet ports. The command interface can be controlled via web browser, command line interface(CLI), TELNET, SSH or SNMP.

With L2+ features, the switches provide better manageability, security, QOS features and performance. VLAN, Port Mirroring, Port Isolation, IGMP Snooping, DHCP Snooping, LLDP, ARP Inspection, Storm Control, IP Source Guard, Access Control Lists, PoE++ management are just some of the features available with this Industrial PoE Switch.

Spanning Tree, Jumbo Frames, Cable diagnostics, Ring Topology are also supported.

The switches are compatible with Green Ethernet standards. The switch can automatically power down the port Ethernet drivers when a link is not active. Active mode is resumed without loss of any packets when the switch detects the link is active. The switches also automatically adjust the signal strength depending on cable length to save power.

The switches require a 48VDC to 57VDC input on the dual input wire - terminal connector which is capable of accepting up to 12AWG wire.



TP-SW8GBT-2SFP 8+2 PoE Switch



TP-SW4GBT-2SFP 4+2 PoE Switch

The units are compatible with Category 5 or higher Ethernet cables with network distances up to 100m. The optical range for fiber ports is up to 120Km. The RJ45 connectors are shielded and grounded to the case. The units have surge protection on all ports and are conformal coated for moisture protection. They have a wide operating temperature range for outdoor and industrial applications.

## Specifications

	TP-SW4GBT-2SFP	TP-SW8GBT-2SFP
<b>Ports</b>	4 Ports 802.3af/at/bt, PoE++ (90W) 2 SFP/LC 2.5Gigabit Fiber Ports 1 Console Port	2 Ports 802.3af/at/bt PoE++ (90W) (Port 1-2) 6 Ports 802.3af/at, PoE+ (30W) (Port 3-8) 2 SFP/LC 2.5Gigabit Fiber Ports 1 Console Port
<b>Ethernet Transmission Speed</b>	1000 Mbps (Gigabit) / 100 Mbps /10 Mbps Auto-negotiation	
<b>Fiber Transceiver Compatibility</b>	155M / 1.25G / 2.5G Multi Mode or Single Mode	
<b>Connections</b>	Shielded RJ45, Shielded SFP/LC, Grounded to Case	
<b>Power Input</b>	Vin 48VDC to 57VDC on Dual Input Wire Terminal (Max wire size 12AWG)	
<b>Self Consumption</b>	< 5 watts typical	
<b>LED's – Normal State</b>	Power:Red ; System:Green ; Ethernet Link:Green Flashing ; PoE:Amber ; Fiber:Green	
<b>PoE Protections</b>	Over Voltage, Over Current, Short Circuit	
<b>PoE Pinout</b>	802.3af/at Ports = 1/2 V- ; 3/6 V+	802.3bt Ports = 1/2,7/8 V- ; 3/6,4/5 V+
<b>Surge Protection</b>	6KV Normal Mode, 2KV Differential Mode	
<b>ESD Protection</b>	15KV Air, 8KV Touch	
<b>Management Methods</b>	WEB, CLI, TELNET, SSH, SNMP	
<b>VLANS</b>	Supports up to 4K VLANS simultaneously (out of 4096 VLAN IDs); Port-based VLAN; 802.1Q tag-based VLAN	
<b>Port Management</b>	Enable/Disable Port, Speed, Duplex, MTU Setting, Flow Control, Mirroring, In/Out Direction, Speed Limit, Isolation Settings, Unknown Unicast/Multicast/Broadcast Storm Suppression.	
<b>STP</b>	Standard Spanning Tree (STP) 802.1d Rapid Spanning Tree (RSTP) 802.1w Multiple Spanning Tree (MSTP) 802.1s	
<b>Ring Network Protocol</b>	ERPS (Ethernet Ring Protection Switching)	
<b>Link Aggregation</b>	Static/Manual Aggregation, LACP Dynamic Convergence	
<b>IGMP v1/v2/v3 snooping</b>	IGMP limits bandwidth-intensive multicast traffic to only the requesters; supports 256 multicast groups	
<b>MAC Management</b>	Add/Delete, MAC Address learning limit, Dynamic Aging Time Setting	
<b>Layer 3 Switching Functions</b>	Virtual VLAN Interface, ARP, Static Router	
<b>ACL (Access Control List)</b>	Based on source MAC, destination MAC, protocol type, source IP, destination IP, L4 port number. Supports time-range time management.	
<b>QOS (Quality of Service)</b>	802.1p(COS) Classification, DSCP Classification, Source IP/Destination IP/Port Number Classification. Supports SP/WRR/DRR Scheduling Strategy and Traffic Speed Limit (CAR).	
<b>Anti-Attack Support</b>	DOS Defense CPU Protection, limit message send rate ARP Binding (IP, MAC, PORT)	
<b>Other Functions</b>	LLDP, Add/Delete Users, Log user login/operation/status/events, Port security (Dying Gasp/SNMP Trap), Device Reset, Configuration save/restore, NTP time setting, Upgrade Management.	
<b>Jumbo Frame Support</b>	9.6K	
<b>Switching Capacity</b>	18 Gbps	26 Gbps

<b>Packet Forwarding Rate</b>	13.39Mpps	19.34Mpps
<b>Forwarding Mode</b>	Store and Forward	
<b>Package Cache</b>	4M	
<b>RAM / Flash</b>	128MB / 16MB	
<b>Address Table</b>	8K MAC, self-learning	
<b>Network Protocols and Standards Summary</b>	IEEE 802.3i 10BASET, 802.3u 100BASET, 802.3z 1000BASET 802.3x Flow Control 802.3ab Gigabit Media Independent Interface (GMII) 802.1q VLANs 802.1p (QOS) 802.3ad Link Aggregation Control Protocol (LACP) 802.3af /at /bt (PoE) 802.3az Energy-Saving IEEE G.8032 Ethernet ring protection (<50ms) (STP) 802.1d, (RSTP) 802.1w, (MSTP) 802.1s	
<b>Other Industry Standards</b>	EMI: FCC Part 15, CISPR (EN55032) class A EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT), EN-61000-4-5 (Surge) Shock: IEC 60068-2-27 Free Fall: IEC 60068-2-32 Vibration: IEC 60068-2-6	
<b>Environmental Protection</b>	IP40	
<b>Operating Temp</b>	-40 to +85°C (-40 to 185°F)	
<b>Operating Humidity (RH)</b>	5% - 95% (non condensing)	
<b>Storage Temperature</b>	-40 to +85°C (-40 to +185°F)	
<b>MTBF</b>	100,000 hours	
<b>Certifications</b>	CE, FCC, RoHS	
<b>Dimensions (LxWxH)</b>	155*117*38(mm) (6.1 x 4.6 x 1.5")	173*137*61(mm) (6.8 x 5.4 x 2.4")
<b>Weight</b>	0.6kg (1.25lb)	0.85kg (1.87lb)
<b>Warranty</b>	5 Years	

**System Ordering:****TP-SW4GBT-2SFP**

4 PoE++(90W) and 2 SFP Ports Industrial Managed Gigabit Switch

**TP-SW8GBT-2SFP**

2 PoE++(90W) and 6 PoE+(30W) and 2 SFP Ports Industrial Managed Gigabit Switch

**Accessories (Power Supplies):****PSDIN-48-120W**

90-264VAC In, 47-56VDC (adjustable) 2.5A 120W Out Industrial DIN Rail

**PSDIN-48-240W**

90-264VAC In, 47-56VDC (adjustable) 5.0A 240W Out Industrial DIN Rail

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