TP-SWxGBT-2SFP

DATA SHEET

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**

TP-SW8GBT-2SFP 8+2 PoE Switch

Applications

- **Outdoor Network Installations**
- **Cameras and Wireless Radios**
- **Factory networks**
- **PoE Lighting Applications**

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

TP-SWxGBT-2SFP

Jumbo Frame Support	9.6K	
Switching Capacity	18 Gbps	26 Gbps
Packet Forwarding Rate	13.39Mpps	19.34Mpps
Forwarding Mode	Store and Forward	
Package Cache	4M	
RAM / Flash	128MB / 16MB	
Address Table	8K MAC, self-learning	
Network Protocols and Standards Summary	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	
Other Industry Standards	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	
Environmental Protection	IP40	
Operating Temp	-40 to +85°C (-40 to 185°F)	
Operating Humidity (RH)	5% - 95% (non condensing)	
Storage Temperature	-40 to +85°C (-40 to +185°F)	
MTBF	100,000 hours	
Certifications	CE, FCC, RoHS	
Dimensions (LxWxH)	155*117*38(mm) (6.1 x 4.6 x 1.5”)	173*137*61(mm) (6.8 x 5.4 x 2.4”)
Weight	0.6kg (1.25lb)	0.85kg (1.87lb)
Warranty	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

RoHS compliant

For further information contact:

Tyconsystems.com

TYCON Power®

14641 S 800 W Ste A
Bluffdale, UT 84065
PH: 801-432-0003
FAX: 801-618-4220

Specifications Subject to Change Without Notice