



## DATA SHEET

### Managed Industrial AT/BT/PASV PoE Switch

#### Features

- Industrial Strength (-40C to +75C Operating Temperature)
- 10/100/1000 Gigabit Compatible Ethernet and 1G Fiber
- Ultimate Flexibility for Broadband and Security Integrators:
  - Port 1-2 802.3at or Passive 24V PoE, 30W
  - Port 3-4 802.3bt 90W or 802.3at 30W
  - Port 5-8 802.3at 30W
  - Port 9-10 1Gb SFP Single/Multimode Fiber ports
- Manageable via Console Port or IP
- Surge Protected Voltage and Ethernet Inputs, Metal Shell
- Integrated DIN Rail Mount and Wall Mounts



TP-SW8GAT/BT/24-SFP  
Industrial PoE Switch

#### Applications

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

#### Description

The TP-SW8GAT/BT/24-SFP Power over Ethernet (PoE) 10 port Gigabit switches offered by Tycon® are fully automatic high speed Layer 2+ Ethernet manageable switches. The switch has user configurable PoE ports to provide 802.3AT, 802.3BT and Passive 24V PoE which enables powering different devices from the same PoE Switch. It's two 1Gb SFP fiber ports accept standard single mode or multimode fiber transceivers.

The PoE ports are manageable via the user interface. The maximum total power for all ports is an impressive 360W.

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, Ring Topology are also supported.

The switches feature two separate power inputs for primary and backup power. They require a 37VDC to 57VDC input on the wire terminal connector which is capable of accepting up to 12AWG wire.

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**

	<b>TP-SW8GAT/BT/24-SFP</b>
<b>Ports</b>	Ports 1-2: Configurable as 802.3af/at or 24V Passive PoE, 30W Ports 3-4: Configurable as 802.3af/at(30W) or 802.3bt (90W) Ports 5-8: 802.3af/at 30W Ports 9-10: SFP Fiber Transceivers Console Port (38400 Baud, 8 Bit, N parity, 1 stop bit, N flow control) Alarm Input (5-57VDC 0.5mA) Alarm Relay Output (up to 60V 3A Switching) Temperature/Humidity Probe Input
<b>Ethernet Transmission Speed</b>	1000 Mbps (Gigabit) / 100 Mbps /10 Mbps Auto-negotiation
<b>Fiber Transceiver Compatibility</b>	1G Multi Mode or Single Mode
<b>Connections</b>	Shielded RJ45, Shielded SFP/LC, Grounded to Case
<b>Power Input</b>	Vin 37VDC to 57VDC on Dual Input Wire Terminal (Max wire size 12AWG)
<b>Self Consumption</b>	< 3 watts typical
<b>LED's – Normal State</b>	Port 9-10: (SFP LED) PoE Port 1-2:(Green=48V; Orange=24V); Link port:(Green=Link LED) Port 3-8:(Green=Link LED; Green=PoE LED) PWR:( Power/system LED), Flashing means Normal Power V1: (Master power LED) V2: (Slave power LED) HW:(Ring network ON LED)
<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 = 1/2,4/5 V+ ; 3/6,7/8 V- 24V Passive PoE = 4/5 V+ ; 7/8 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 4094 active VLANs simultaneously (out of 4096 VLAN IDs); Port-based VLAN; 802.1Q tag-based VLAN; 802.1ad Q-in-Q Tunneling, Private Vlan (Protected Port), GARP/GVRP
<b>Port Management</b>	PoE enable/disable, PoE Mode control, Soft Re-boot PoE Port, Total PoE Power budget control, PoE Port priority, PoE port power limitation, PD Classification Detect, PD alive check, PoE scheduling
<b>STP</b>	Standard Spanning Tree (STP) 802.1d, Rapid Spanning Tree (RSTP) 802.1w Multiple Spanning Tree (MSTP) 802.1s Loop guard, TC-BPDU Guard, BPDU Guard, BPDU Filter
<b>Ring Network Protocol</b>	ERPS (Ethernet Ring Protection Switching), <20ms G.8032 ERPS Ring
<b>Link Aggregation</b>	Static/Manual Aggregation, LACP Dynamic Convergence, Algorithm based on source/destination IP or MAC
<b>IGMP v1/v2/v3 snooping</b>	IGMP limits bandwidth-intensive multicast traffic to only the requesters; supports 256 multicast groups, MLD snooping, Multicast VLAN
<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), 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>	9216 Bytes
<b>Switching Capacity</b>	20 Gbps
<b>Packet Forwarding Rate</b>	14.88Mpps @ 64 Bytes
<b>Forwarding Mode</b>	Store and Forward
<b>Package Cache</b>	4.1M
<b>RAM / Flash</b>	1 Gb / 128MB
<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) IEEE G.8032 Ethernet ring protection (<20ms) (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 +75°C (-40 to 167°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>	50,000 hours
<b>Certifications</b>	CE, FCC, RoHS
<b>Dimensions (LxWxH)</b>	165*145*53.5(mm) (6.5 x 5.7 x 2.1")
<b>Weight</b>	0.9kg (2lb)
<b>Warranty</b>	5 Years

**System Ordering:****TP-SW8GAT/BT/24-SFP**

Industrial Managed Gigabit PoE Switch with 2 802.3bt(90W), 2 24V Passive PoE (30W), 4 802.3at(30W) Ports

**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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