

### Product Datasheet 1



## TS-3048GP-4XS

52-port Layer 3 Managed 10Gigabit Ethernet PoE Switch

*Full Gigabit Ethernet PoE Switch with 10Gbps fiber uplink interfaces* 

#### Overview

Teroline's TS-3048GP-4XS series are Layer 3 managed full Gigabit Ethernet PoE Switches with 48  $\times$  10/100/1000Base-T RJ45 PoE ports and 4  $\times$  1G/2.5G/10GbE SFP+ ports. It is featured with dynamic L3 routing and full L2 features such as VLAN, QoS, IGMP, Port Mirroring, LLDP, security, G.8032 ERPS ring protection and IPv4/6 based network management.

TS-3048GP-4XS is an ideal solution featured with wire-speed high-performance switching capability for small and medium enterprises as well as cost efficient L2/L3 WAN access application scenarios. Designed with a built-in wide-range AC power supply and standard 1RU 19-inch pizzabox, it's environment-friendly with a controllable fan for energy-saving and noise reduction. It supports various means of configuration and management, including CLI, secure web and standard SNMP, thus applicable for various SME L2/L3 cost-efficient leased-line service access, video surveillance and FTTB/FTTC access applications.

### Key features

- > 4 x 1G/2.5G/10GbE SFP+ fiber interfaces and 48 x 10/100/1000BASE-T RJ45 PoE LAN interfaces, one RJ45 Console interface
- > Dynamic L3 routing and full L2 switching functions and IPv4/IPv6 network management
- > ITU-T G.8032 standard ERPS Ring with sub-20ms switchover time
- > Up to 30W 802.3af/at PoE+ output per port with watchdog function
- > Up to 10K Bytes Jumbo Frame support
- > Various configuration and management ways such as CLI/web/SNMP
- > 1RU 19" rack mounted, wide-range AC power supply
- > 6KV/4KV surge protection on power and Ethernet LAN ports respectively





# Specifications

Interface Specifications	Fiber port	4 * 1G/2.5G/10GbE SFP+
	Copper port	48 * 10/100/1000Base-T PoE (RJ45)
	Management Port	1 * RJ45 Console
	Reset button	Reset the switch to factory default
Power	Input voltage	100-240VAC, 50/60Hz
Specifications		Built-in power supply
	Power consumption	≤ 440W (370W PoE) total, TS-3048GP-4XS-440
		≤ 650W (600W PoE) total, TS-3048GP-4XS-650
		≤ 850W (740W PoE) total, TS-3048GP-4XS-850
	Over-voltage protection	Supported
	Over-current protection	Supported
LED Indicators	1 – PWR (Green)	Power on indicator
	2 – SYS (Green)	System working status indicator
	3 – LNK/ACT (Green)	RJ45 port link up/down/act indicator per port
	4 – PoE (Yellow)	RJ45 PoE status indicator per port
	5 – LNK/ACT (Green)	SFP port link up/down/act indicator per port
Specifications	Switching capacity	352Gbps
	Packet forwarding rate	236Mpps
	MAC address table	16K
	VLAN	4K
	Buffer	12Mb
	Forwarding delay	< 5us
	Jumbo frame	10K bytes
	Auto MDI/MDIX	Supported
	Watchdog	Supported
L2 Switching	Link Aggregation	Static and dynamic Link Aggregation
	Port-based Features	IEEE 802.3x flow control
		Port-based traffic statistics
		Port isolation
		Broadcast storm control
	VLAN	Access, trunk and hybrid mode
		VLAN tagging based on MAC/IP/protocol
		Port-based Q-in-Q
		Flexible Q-in-Q
	Port Mirroring	Multiple to one port mirroring
	Ring Protection	STP/RSTP/MSTP
		ITU-T G.8032 ERPS, sub-20ms switchover time
	DHCP	DHCP Client
		DHCP Snooping
	Multicast	IGMPv1, v2 & v3
		IGMP Snooping
	ACL	ACL policies based on MAC/IP
	Quality of Service (QoS)	Ingress/egress port-based rate-limiting
		QoS class remarking
		Support policy-based QoS
		SP and WRR queue scheduling
	Security	IEEE 802.1x port/MAC authentication

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		RADIUS
		IP Source Guard, port/MAC/IP binding
		ARP inspection and filtering
	Management and	HTTP/HTTPS web management
	Maintenance	SNMPv1/v2c/v3 support
		Support IPv6 for management
		Syslog and alarm classification
		Support RMON
		Support LLDP
		Support NTP
		Support optic transceiver DDM
		Support Ping/Tracert for diagnosis
		Support Telnet and SSH connection
		Support PoE management
		Support TFTP and web for upgrade
_3 Routing	ARP	ARP table aging
	Routing entry	13К
	<u>, , , , , , , , , , , , , , , , , , , </u>	Static routing
	ECMP	ECMP
		ECMP max next-hop configuration
		Capacity balanced configuration
	Route policy	IPv4 prefix-list
	Redundancy	Support VRRP
	IP Routing Protocol	RIP v1/v2
	5	OSPF v2
		IS-IS v4
		BGP4, supporting routing recursive ECMP
		Viewing the number of neighbors and states
Standards	IEEE 802.3	10BASE-T
	IEEE 802.3u	100BASE-TX
	IEEE 802.3ab	1000BASE-T
	IEEE 802.3z	1000Base-X
	IEEE 802.3x	Full-duplex flow control
	IEEE 802.1d/w	Spanning Tree/Rapid Spanning Tree
	IEEE 802.1Q	VLAN
	IEEE 802.1X	Port Authentication
	IEEE 802.1ab	LLDP
	IEEE 802.3ad	LACP
	ITU-T G.8032	ERPS
	IEEE 802.3af/at	POE/POE+
Environment	Operating temperature	0°C to +50°C
Standards	Storage temperature	-40°C to +85°C
	Relative humidity	5% to 95% (non-condensing)
	Thermal design	Controllable fans
	MTBF	100,000 hours
	Power port surge	IEC 61000-4-5 6KV (8/20us)
	protection	
compliance	Ethernet port surge	IEC 61000-4-5 Level 4: 4KV (10/700us)
	protection	1201000-4-5 Level 4. 4KV (10/70005)
	EMI	FCC Part 15B Class A
	Certifications	CE, FCC, RoHS



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Physical	Dimensions	440(W)*300(D)*44(H)mm	
parameters			
	Installation Method	19-inch 1RU rack mounted	
Warranty	Standard Warranty	2 years	

## Ordering information

Model	Description
TS-3048GP-4XS- 370	L3 managed 10Gigabit Ethernet PoE Switch, 48x10/100/1000Base-T RJ45 PoE + 4x1G/2.5G/10GbE SFP+ ports, AC100-240V, 50/60Hz built-in power supply, 370W PoE budget, 19-inch 1RU rack mounted, operation temperature: 0°C to +50°C
TS-3048GP-4XS- 600	L3 managed 10Gigabit Ethernet PoE Switch, 48x10/100/1000Base-T RJ45 PoE + 4x1G/2.5G/10GbE SFP+ ports, AC100-240V, 50/60Hz built-in power supply, 600W PoE budget, 19-inch 1RU rack mounted, operation temperature: 0°C to +50°C
TS-3048GP-4XS- 740	L3 managed 10Gigabit Ethernet PoE Switch, 48x10/100/1000Base-T RJ45 PoE + 4x1G/2.5G/10GbE SFP+ ports, AC100-240V, 50/60Hz built-in power supply, 740W PoE budget, 19-inch 1RU rack mounted, operation temperature: 0°C to +50°C