

### Product Datasheet 1



### TS-3016GS-8GC-4XS

28-port Layer 3 Managed 10GbE Fiber Switch

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

#### Overview

Teroline's TS-3016G-8GC-4XS is a Layer 3 managed full Gigabit Ethernet Switch with 16 x 100/1000Base-X SFP + 8 x 1GbE Combo, and 4 x 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-3016G-8GC-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 and Active Ethernet based FTTB/FTTC residential broadband access scenarios.

#### Key features

- > 4 x 1G/2.5G/10GbE SFP+ fiber interfaces, 16 x 100/1000BASE-X SFP + 8 x 1GbE Combo 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 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
- > Controllable fan speed for energy saving and noise reduction



## Product Datasheet 2

## Specifications

Interface	Fiber port	4 * 1G/2.5G/10GbE SFP+	
Specifications		16 * 100/1000Base-X SFP	
		8 * 1000Base-X SFP (in Combo)	
	Copper port	8 * 10/100/1000Base-T (RJ45 in Combo)	
	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	≤ 25W (full load)	
	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 – SPEED (Yellow)	RJ45 port speed indicator per port	
	5 – LNK/ACT (Green)	SFP port link up/down/act indicator per port	
Specifications	Switching capacity	128Gbps	
•	Packet forwarding rate	95Mpps	
	MAC address table	16К	
	VLAN	4К	
	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	
	•	RADIUS	



## Product Datasheet

		IP Source Guard, port/MA	-
	Management and	ARP inspection and filteri	-
	Management and Maintenance	HTTP/HTTPS web manage	inent
	Maintenance	SNMPv1/v2c/v3 support	mant
		Support IPv6 for manager	
		Syslog and alarm classific	ation
		Support RMON	
		Support LLDP	
		Support NTP	
		Support optic transceiver	
		Support Ping/Tracert for	-
		Support Telnet and SSH c	
		Support TFTP and web for	rupgrade
L3 Routing	ARP	ARP table aging	
	Routing entry	13K	
	ΙΡν4/ΙΡν6	Static routing	
	ECMP	ECMP	
		ECMP max next-hop conf	iguration
		Capacity balanced config	uration
	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 ne	
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 Spai VLAN	ining free
	IEEE 802.1Q		
	IEEE 802.1X	Port Authentication	
	IEEE 802.1ab	LLDP	
	IEEE 802.3ad	LACP	
	ITU-T G.8032	ERPS	
Environment	Operating temperature	0°C to +50°C	
	Storage temperature	-40°C to +85°C	
	Relative humidity	5% to 95% (non-condens	ing)
	Thermal design	Controllable fans	
	MTBF	100,000 hours	
Standards	Power port surge	IEC 61000-4-5 6KV (8/20)	ב (s)
compliance	protection		
	Ethernet port surge	IEC 61000-4-5 Level 4: 41	(V (10/700us)
	protection		· ·
	EMI	FCC Part 15B Class A	
	Certifications	CE, FCC, RoHS	
Physical	Dimensions	440(W)*245(D)*44(H)mm	
parameters	Dimensions		
Parameters	Installation Method	19-inch 1RU rack mounte	d
Warranty	Standard Warranty		
vvalially	Stanualu Walidilly	2 years	



# Ordering information

Model	Description
TS-3016GS-8GC-	L3 managed 10Gigabit Ethernet Switch, 16x100/1000Base-X SFP + 8x1GbE
4XS	Combo, and 4x1G/2.5G/10GbE SFP+ ports, AC100-240V, 50/60Hz power
	supply, 19-inch 1RU rack mounted, operation temperature: 0°C to +50°C

