

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 |

