

PoE+ Series Switches

EFFICIENT AND RELIABLE POE SWITCHES



Overview

PulseOptics full Gigabit Ethernet PoE+ switches is a new-generation intelligent access switch designed for enterprise networks, can be used as Ethernet Power Sourcing Equipment (PSE).

It can automatically identify the connected devices whether compatible with IEEE 802.3af or IEEE 802.3at standards and supply power for them.

The Gigabit PoE+ switch makes it easier to deploy wireless access point (AP) and IP-based terminal network equipment with PoE technology.

Benefits

- Complete PoE Power Supply
 - Varied QoS Policies
- Complete Security Mechanisms
 - Support L2+
 - Powerful ACL functions
- Supports the telecom-level Ethernet- ring protection protocol
- Support various L2 multicast functions

Key Features

Intelligent POE+

Supports IEEE 802.3AF/AT POE standard and power mapping scales up to a maximum of 370W of PoE+ power.
Supports POE non-stop power supply and the PoE+ power is maintained during a switch reload.
Supports manual and dynamic POE power allocation.
Supports up to 2KV thunder-proof of the POE port and power supply.

Enhanced QoS

Supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority, better streamlining carrier's services.
Provides flexible bandwidth control policies, supporting port-/flow-based flow limit, ensuring the line speed forwarding of each port.
Supports multiple queue schedule algorithms such as SP, WRR and "SP + WRR".

Security+

Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP- related SYN Flood, UDP Flood, Broadcast Storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.
Perfect security authentication mechanisms: IEEE 802.1x, Radius and Tacacs+.
Supports storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.
Supports perfect ring detection mechanism, ensuring the long-term stable running of network.
Supports port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.

Easy Management and Maintenance

Supports many management modes such as the CLI, Telnet, SSH, SSL and SNMP.
Supports the WEB management mode, which is easy and efficient for installing and debugging the device.
Supports FTP, TFTP and SFTP.
Supports ISSU (In-Service Software Upgrade).
Supports SNMP smart network management platform. The combination realizes automatic equipment discovery, network topology management, equipment configuration management, performance data statistics and analysis and trouble management.
Supports Zero Touch Provisioning (ZTP) function to minimize manual operator intervention and helps reduce customers' initial deployment costs.

Technical Specification

PulseOptics PoE+series switches come with the industry-standard hardware and FSOS.

| CHARACTERISTICS | | | |
|-----------------------------------|--|-------------------------------|----------------------------------|
| | SW-M8GPP-2SFP | SW-M24GPP-4SFP | SW-M48GPP-8SFP |
| Ports | | | |
| Switch Ports | 8 x RJ-45 and 2 x SFP | 24 x RJ-45 and 4 x SFP | 48 x RJ-45 and 8 x SFP+ |
| Operating System | | | |
| OS | FSOS | FSOS | FSOS |
| Key Components | | | |
| CPU | MIPS-4K Ec | MIPS-4K Ec | BCM53003 |
| Performance | | | |
| Switch Class | Layer 2+ | Layer 2+ | Layer 2/3 |
| Switching Capacity | 18 Gbps | 42 Gbps | 256 Gbps |
| Forwarding Performance | 15 Mpps | 95 Mpps | 192 Mpps |
| Jumbo Frames | 9KB | 9KB | 9KB |
| Switch Method | Storage and forward | Storage and forward | Storage and forward |
| Max. Sound Level | 41.5 dB | 37.5 dB | 45 dB |
| Airflow Direction | Font to back | Right to left | |
| Power | | | |
| Max. Power Consumption | 260W | 400W | 500W Single and 1000W Dual Power |
| Power Budget | 240W | 370W | 370 Single and 740W Dual Power |
| Input Range | 100-240VAC, 50/60Hz | 100-240VAC, 50/60Hz | 100-240VAC, 50/60Hz |
| Output Voltage | 48V DC | 48V DC | |
| PoE Standard | Compliant with IEEE802.3af/at | Compliant with IEEE802.3af/at | Compliant with IEEE802.3af/at |
| PoE Protocols | IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1Q (VLAN), IEEE 802.1w (RSTP) | | |
| Physical and Environmental | | | |
| Fan Number | 1 | 2 | 3 |
| Dimensions (WxDxH) | 280 x 180 x 45mm | 440 x 230 x 44mm | 440 x 350 x 44mm |
| Rack Space | 19" | 19" | 19" |
| Operating Temperature | 0°C to 50°C | 0°C to 50°C | 0°C to 50°C |
| Storage Temperature | -20°C to 70°C | -20°C to 70°C | -20°C to 70°C |
| Relative Humidity | 10% to 90% | 10% to 90% | 5% to 95% |
| Weight | 1.78kg | 3.5kg | 5.5kg |
| Max. Power Supply Distance | 100M | 100M | 100M |
| Warranty | | | |
| Warranty | 3 Years | 3 Years | 3 Years |

Features

Layer 2 Features

VLANs

- Supports 4K Active VLAN
- Supports Voice VLAN
- IEEE 802.1Q VLAN
- GVRP
- Private VLAN
- QinQ & Selective QinQ
- VLAN Translation

Spanning Tree Protocol

- IEEE 802.1D Spanning Tree

Protocol (STP)

- IEEE 802.1w Rapid Spanning

Tree Protocol (RSTP)

- IEEE 802.1s Multiple Spanning

Tree Protocol (MSTP)

- BPDU Guard/Filtering/Transparent
- Root Guard
- Loopback Detection

IGMP Snooping

IGMP Proxy Reporting

- IGMP Filtering
- IGMP Immediate Leave
- IGMP Querier
- IGMP Mrouter-forward Mode

Link Aggregation

- Static Link Aggregation
- 802.3ad with LACP

EAPS and ERPS

DHCP

- DHCP Client
- DHCP Option 82
- DHCP Snooping

Storm Control • Broadcast/

Multicast/ Unknown Unicast

Storm Control

Jumbo Frames

- 9 KB

MVR (Multicast VLAN Registration)

- Supports 5 Multicast VLANs Port

Mirroring

- Remote Port Mirror (RSPAN)

Non-Spanning Tree Loopback

Detection

Port Security

IP Source Guard

Dynamic Arp Inspection UDLD

OAM

CFM and Y1731

ISSU (In-Service Software Upgrade)

QoS Features

Scheduling for priority queues

- WRR Priority Scheduling
- Strict Priority Scheduling
- Hybrid (DRR/WRR+ Strict)

COS

DiffServ

- 8 Priority Queues

IEEE 802.1P

DSCP

Tail-Drop

WRED

Flow Monitoring and Traffic

Shaping

Security

AAA

- Radius client
- Tacacs+ client

802.1X

- Local/radius Authentication
- Port-based Authentication
- Mac-based Authentication

Port Isolation

Port Security

"IP+MAC+port" Binding

MAC Sticky

HTTPS and SSL

SSH V1/2

DHCP Snooping

- Option 82

IP Source Guard

DoS Protection Anti-attack from

DDoS

TCP's SYN Flood

UDP Flood

ACL

L2/L3/L4 ACL Flow Identification and Filtration

Ingress

Egress

Statistics

IPv4/IPv6/MAC/ARP ACL

IPv6

IPv4/IPv6 Dual Protocol Stack

IPv6 Address Type

- Unicast
- Multicast

ICMPv6

IPv6 Neighbor Discovery

IPv6 Neighbor Discovery Snooping

Manual Configuration

IPv6 DHCP Snooping

IPv6 MLD Snooping

SNMP over IPv6

HTTP over IPv6

Management

Switch Management

- CLI via Console Port or Telnet
- Web Management
- SNMP v1, v2c, v3

Firmware & Configuration

• Firmware Upgrade via TFTP/

HTTP/FTP Server

- Dual Images (SPAN,RSPAN)
- Multiple Configuration Files
- Configuration File Upload/

Download via TFTP/HTTP/FTP

Server

- Firmware Auto Upgrade RMON

MIB II

NTP

ZTP(Zero Touch Provisioning)

Supports LLDP (802.1ab)

Ping

Traceroute

Accessories for SW-M8GPP-2SFP and SW-M24GPP-4SFP



Console Cable*1



Power Cords*1



User Manual*1



Screws*8



Rubber Pads*4



Rack Mount Brackets*2

Accessories for SW-M48GPP-8SFP



Console Cable*1



Power Cords*2



User Manual*1



Screws*6



Rubber Pads*4



Rack Mount Brackets*2



For more information call
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