

Gigabit Ethernet Access Switches

FLEXIBLE ACCESS SWITCHES FOR CONVERGED ENTERPRISE NETWORKS

PulseOptics access switches are high-performance Gigabit Ethernet L2+/L3 Lite managed switches with 128Gbps/176Gbps switching capacity.



Overview

PulseOptics switches are Gigabit Ethernet access switches with twenty-four/ forty-eight 1G downlink ports and four 10G uplinks. The switches are ideal for Internet Service Providers (ISPs) and Multiple System Operators (MSOs) to provide home users with triple-play services with up to Gigabit bandwidth. They are also ideal Gigabit access switches for SMB, enterprise, and campus networks.

PulseOptics series switches are packed with features that bring high availability, comprehensive security, robust multicast control, and advance QoS to the network edge, while maintaining simple management.

Benefits

- Layer 2+ / Layer 3 Lite
- BCM56150 / BCM56151 Switch Chip
- Up to 10G Uplinks and Stack Links
- Industry-standard CLI & Web Management
- 1+1 Redundant Power Supply
- Green Ethernet, Low Power Consumption

Key Features

Performance and Scalability

PulseOptics series switches are high-performance Gigabit Ethernet L2+/L3 Lite managed switches with 128Gbps/176Gbps switching capacity. The switch delivers wire-speed switching performance on all Gigabit ports, taking full advantage of existing high-performance Gigabit CPEs, PCs, 11n/ac Wi-Fi Applications etc, significantly improving the responsiveness of applications and file transfer times.

The 4 built-in 10G SFP+ ports provide uplink flexibility, allowing the insertion of fiber or copper, Gigabit or 10G transceivers, to create up to 10G high-speed uplinks and stack links to servers or service provider, corporate, or campus networks, reducing bottlenecks and increasing the performance of the access network.

Reliability and Energy Efficiency

The fanless design of SW-M24G-4SFP ensures noise less operation and increases the reliability of the system. The design of the PulseOptics series switches incorporates high energy efficiency in order to reduce the impact on the environment. The Green Ethernet power-saving features and fanless design significantly reduce the power consumption.

Robust Multicast Control

IGMP snooping prevents the flooding of multicast traffic by dynamically configuring switch ports so that multicast traffic is forwarded to only those ports associated with an IP multicast receiver. IGMP increases the performance of networks by reducing multicast traffic flooding.

Superior Management

An industry-standard command-line interface (CLI), accessed through the console port or Telnet, provides a familiar user interface and command set for users to manage switches.

An embedded user-friendly web interface helps users to quickly and simply configure switches.

Continuous Availability

The IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to the core network with rapid convergence, to ensure faster recovery from failed links, enhancing overall network stability and reliability.

The IEEE 802.1s Multiple Spanning Tree Protocol runs STP per VLAN base, providing Layer 2 load sharing on redundant links up to 64 instances.

Technical Specification

PulseOptics series switches come with advanced hardware architecture design and abundant L2 and L2+ features.

CHARACTERISTICS			
	SW-M24G-16SFPP	SW-M24G-4SFP	SW-M48G-4SFP
Ports			
Gigabit RJ45 Ports	24	24	48
1GE SFP Ports	-	-	-
10GE SFP+ Ports	16	4	4
Combo Ports	-	-	-
GE Out-of-band Management Port	-	1	1
Console Ports	1	1	1
Operating System			
OS	FSOS	FSOS	FSOS
Key Components			
Switch Chip	NXP LS1023A	BCM56150	BCM56150
Performance			
Switch Class	Layer 3	Layer 2+	Layer 2+
Switching Capacity	368 Gbps	128 Gbps	176 Gbps
Forwarding Performance	400 Mpps	95 Mpps	130 Mpps
Jumbo Frames		9KB	9KB
Packet Buffer	4MB	1.5MB	1.5MB
Flash Memory	4GB (eMMC)	64MB	64MB
DDRIII Capacity		512MB	512MB
MAC Address Table Size	64K	16K	16K
Auto-Negotiation	YES	YES	YES
Auto-MDI/MDIX	YES	YES	YES
Power			
Input Voltage	100-240VAC, 50/60Hz	100-240 V AC, 50-60 Hz, 0.8 A	100-240 V AC, 50-60 Hz, 1.5 A
Max Power Consumption	70W	21W	45W
Physical and Environmental			
Dimensions (WxDxH)	440 x 350 x 43.6mm	440 x 280 x 44mm	440 x 280 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	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C
Relative Humidity	0% to 95%	5% to 90%	5% to 90%
Weight	5.8kg	3.975kg	4.9kg
Warranty			
Warranty	3 Years	3 Years	3 Years

Features

Layer 2 Features

IGMP

- Filtering
- Throttling
- Immediate Leave
- Querier
- mrouter-forward mode
- router-port-expire-time
- tcn-flood
- tcn-query-solicit
- unregistered-data-flood

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)

Stacking Links

- L2/L3 supported
- VLAN membership supported
- Trunking supported
- IPMC supported

Non-Spanning Tree Loopback

detection

Port security

IP Source Guard

Dynamic Arp Inspection

ERPS

IEEE 802.1ag CFM

ITU-T.Y.1731 OAM

UDLD

Layer 3 Features

Unicast Routing

- Static Unicast Routes

ARP

QoS Features

Scheduling for priority queues

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

IEEE 802.1p COS

DiffServ

- 8 Priority Queues

Security

AAA

- Radius client
- Tacacs+ client

802.1X

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

HTTPS and SSL (v3)

SSH V2.0

IP Source guard

DoS Protection

ACL

L2/L3/L4

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

MVR over IPv6

SNMP over IPv6

HTTP over IPv6

Management

Switch Management

- CLI via console port or Telnet
- Web management
- SNMP v1, v2c, v3

IP clustering (32 members)

Firmware & Configuration

• Firmware upgrade via TFTP/ HTTP/FTP server

- Dual images
- Multiple configuration files
- Configuration file upload/ download via TFTP/HTTP/FTP server
- Firmware auto upgrade

RMON (groups 1, 2, 3 and 9)

MIB II

DHCP/BOOTP

- Client
- Relay

SNTP/NTP

DNS client

Syslog

SMTP

Supports LLDP (802.1ab)

Ping

Traceroute

sFlow

Accessories

Console Cable*1



Power Cords*2



Grounding Cable*1



Screws*6



Rubber Pads*4



Rack Mount Brackets*2



For more information call
PulseOptics on 1300 723 600