

SWM-24 SERIES

LAYER 2 CARRIER-CLASS ETHERNET ACCESS SWITCHES



Overview

SWM-24 series is a new-generation smart access switch designed for carrier's IP MAN and enterprise networks. Based on the new-generation high-performance hardware and software platform, it supports functions such as ACL, QinQ and QoS.

FULL GIGA

L2

STP, RSTP, MSTP

POE

Specifications

Carrier-class Ethernet Access Switches

- SWM-24 Series supports the telecom-level Ethernet **ring protection protocol** with a protection shift time of **less than 50ms**, **STP/RSTP/MSTP**, **backup of active and standby uplinks**, and **LACP** link aggregation to cater to the requirements of high reliability of carriers.
- SWM-24 Series has **powerful ACL** functions to access and control **L2-L7 data based** on physical port, **VLAN, MAC, IP and protocol port ID**, and providing carriers flexible and various policy control methods.
- SWM-24 Series **supports ISSU** (In-Service Software Upgrade), which guarantees the user data non-stop forwarding when the system is upgrading.
- SWM-24 Series supports **various L2 multicast function**, including user **fast-leave mechanism** and **cross VLAN multicast replication** function.
- SWM-24 supports security functions as SSL v2, v3, TLS v1, Guest VLAN.

Complete POE Power Supply Function

- SWM-24 Series supports **802.3AF/AT standard**, built in high-power power supply, **and 24-port POE+ power supply**.
- SWM-24 Series **supports POE non-stop powering** when it is in hot-restart.
- SWM-24 Series **supports power port priority** when the power is not efficient.
- SWM-24 Series supports the **POE port with 2KV thunder prevention**.
- SWM-24 outdoor POE switches with cast-aluminium-alloy made chassis supports -40~70℃ operating temperature, up to 6KV thunder-proof, EMC-4 standard, IP65 protection grade.

Rich QoS Policies

- SWM-24 Series supports **complex traffic classification** based on **VLAN IDs, source MAC/IP addresses, destination MAC/IP addresses**, IP protocols, or priorities. It also supports **priority remark**. These functions provide an effective way for users to optimize their businesses.
- Provides flexible **bandwidth control** policies, supporting **port-/flow-based** flow limit, and ensuring the line speed forwarding of each port to make sure the **high quality of video**, audio and data services
- SWM-24 Series also supports **multiple queue grooming algorithms** such as **SP, WRR or SP+WRR**.

Comprehensive IPv6 Solutions

- SWM-24 Series supports the **IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6, path MTU discovery**, etc.
- SWM-24 Series supports **IPv6 based Ping, Traceroute, Telnet, SSH, ACL**, meeting the need of IPv6 network equipment management and service control.

Comprehensive Security Mechanisms

- SWM-24 Series adopts advanced hardware architecture design, realizing the hierarchical scheduling and protection of the packet. It provides **multiple security measures to defend against attacks from SYN Flood, UDP Flood, broadcast storm and mass flow of DOS or TCP**. It also supports command line authority control based on user levels.
- Comprehensive Security Certification: SWM-24 Series complies with **IEEE 802.1x, Radius, Tacacs+**.
- SWM-24 Series supports the **suppression of broadcast, multicast and unknown unicast packet**, ensuring the equipment can operate normally in harsh network conditions.
- SWM-24 Series has the perfect **loop detection mechanism**.
- SWM-24 Series supports the **port isolation in a same VLAN, DHCP-Snooping and IP+MAC+ port binding**.

Convenient Management and Maintenance

- SWM-24 Series supports multiple management styles such as **Console, Telnet and SSH**.
- SWM-24 Series supports **WEB based management**. The management is more simple and effective.
- SWM-24 Series supports **upload and download of TFTP files**.
- SWM-24 Series supports **SNMP**. By cooperating with NMS, functions including the equipment auto-discovery, the topology management, the equipment configuration management, the performance data analysis, and the fault management can be realized. In this way, the network management is simplified and the user get a new product experience.

Specifications

Part Number	SWM-2410-R-A	SWM-2410-P-A	SWM-2428-S-A	SWM-2428-P-A
Switching capacity	64Gbps	64Gbps	64Gbps	56Gbps
Forwarding	15Mpps	15Mpps	42Mpps	42Mpps
RAM	128MB			
Flash	8MB			
MAC Table	4K/8K			
Ports	8 Gigabit TX Ports + 2 Gbps SFP ports	8 POE Gigabit TX port and 2 Gbps SFP ports	24 Gigabit optical ports + 4 combo gigabit TX/SFP ports	24 POE+ Gigabit ports + 4 Gigabit SFP ports
Dimensions (WxDxH) mm	240x150x42	308x224x42	440x180x44	440x230x44
Power	AC : 100-240V, 50Hz±10% DC : -36V ~ -72V (POE doesn't support DC power)			
Environment	Operating temperature/humidity : -10°C-55°C; 10%-95% non-condensing Storage temperature/humidity : -20°C-70°C, 5%~95% non-condensing			
Power Consumption	<15W	<30W	<45W	No load <17W Full load : 393.5W
POE Power	-	240W	-	400W
POE/POE+	-	Support	-	Support
OSPF / BGP	no	no	yes	yes
Mac Switching Function	Static configuration and dynamically learning of MAC address, check and delete MAC address, Configuring of MAC address aging time, Limit on MAC address learning number, MAC address filtering function.			
VLAN	4K VLAN entries, GVRP, 1:1 and N:1 VLAN Mapping, QinQ, Private VLAN			
STP	802.1D (STP), 802.1W (RSTP), 802.1S (MSTP), BPDU protection, root protection and ring protection.			
Multicast	IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, Multicast group policy and multicast number limit, Multicast traffic cross VLAN duplication.			
IPv4	Static routing, RIP v1/v2, [OSPF and BGP, only limit to SWM-2428-S-A and SWM-2428-P-A]. 802.3ag, 802.3ah			
IPv6	ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet, IPv6 Neighbor Discovery, MLD v1/v2, MLD Snooping.			
QoS	Traffic classification of each field of L2/L3/L4 protocol headers, CAR traffic control, 802.1P/DSCP priority remark, Multiple queuing algorithms such as SP, WRR or SP+WRR, Tail-Drop, WRED, Traffic supervision and Traffic shaping.			
Security features	Identification and filtering of L2/L3/L4 based ACL, Defend against DOS or TCP attacks, Suppression of broadcast, multicast and unknown unicast packet, port isolation, Port security, IP+MAC+port binding, DHCP Snooping, DHCP Option 82, IEEE802.1x certification, Radius and Tacacs+, command line authoritycontrol based on user levels			
Relability	Static/LACP link aggregation, EAPS and ERPS, ISSU			
Management and Maintenance	Console, Telnet, SSH 2.0, WEB based management style, SNMP v1/v2/v3, upload and download of TFTP files, RMON.			
MTBF	200.000 hours (MIL-HDBK-217 standard at 25 °C)			



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Ordering Information

Part number	Description
SWM-2410-R-A	Ethernet switch with 8 gigabit TX ports and 2 gigabit optical ports (1 console port, 8 gigabit TX ports, 2 gigabit SFP ports; standard AC220V power supply, fanless, 1U, desktop or wall-mounted installation)
SWM-2410-P-A	Outdoor Ethernet POE switch with 8 gigabit TX ports and 2 gigabit SFP ports (1 console port, 8 gigabit POE TX ports, 2 gigabit SFP ports; standard AC220V power supply, POE power 240W; cast-aluminium-alloy made chassis, -20~70°C operating temperature, up to 6KV thunder-proof, EMC-4 standard, IP65 protection grade, desktop or wall-mounted installation)
SWM-2410-P-D	Outdoor Ethernet POE switch with 8 gigabit TX ports and 2 gigabit SFP ports (1 console port, 8 gigabit POE TX ports, 2 gigabit SFP ports; DC power supply, POE power 240W; cast-aluminium-alloy made chassis, -20~70°C operating temperature, up to 6KV thunder-proof, EMC-4 standard, IP65 protection grade, desktop or wall-mounted installation)
SWM-2418-P-A	Ethernet POE switch with 16 gigabit TX ports and 2 gigabit SFP ports (1 console port, 16 gigabit POE ports, 2 gigabit SFP ports; standard AC220V power supply, POE power 400W; the cooling fan, 1U, standard 19-inch rack-mounted installation)
SWM-2424-R-A	Ethernet switch with 24 gigabit TX ports and 4 combo gigabit TX/SFP ports (1 console port, 24 gigabit TX ports, 4 combo gigabit TX/SFP ports; standard AC220V power supply; fanless, 1U, standard 19-inch rack-mounted installation)
WM-2428-R-A	Ethernet switch with 24 gigabit TX ports and 4 gigabit optical ports (1 console port, 24 gigabit TX ports, 4 gigabit TX/SFP ports; standard AC220V power supply; fanless, 1U, standard 19-inch rack-mounted installation)
SWM-2428-S-A	Ethernet switch with 24 gigabit optical ports and 4 gigabit combo ports (1 console port, 24 gigabit SFP ports, 4 gigabit combo TX/SFP ports; standard AC220V power supply, fanless, 1U, 19-inch rack-mounted installation)
SWM-2428-P-A	Ethernet POE switch with 24 gigabit TX ports and 4 gigabit SFP ports (1 console port, 24 gigabit POE/POE+ ports, 4 gigabit SFP ports; standard AC220V power supply, POE power 400W; 2 cooling fan, 1U, standard 19-inch rack-mounted installation)
SWM-2448-S-A	Ethernet switch with 48 gigabit optical ports and 4 combo gigabit TX ports (1 console port, 48 gigabit SFP ports, 4 combo gigabit TX/SFP ports; standard AC220V power supply, additional RPS power supply interface; the cooling fan, 1U, standard 19-inch rack-mounted installation)



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