

# SWM-2800-8T4X-A

## L3-LITE SWITCH



## Introduction

**SWM-2800-8T4X-A** is a next-generation aggregation 10GE switch introduced by CXR. It is targeted at the IP MAN (metropolitan area network), government and enterprise networks, Internet café and diskless working environment. It is developed on the basis of high performance hardware and ROS software platform with CXR own independent intellectual property rights. It supports functions such as powerful ACL, flexible QinQ, 1:1 or N:1 VLAN switching, Ethernet OAM, carrier-level QoS and industry-level 10GE Ethernet ring, ensuring this switch series meets application requirements in all kinds of complicated sites. It also supports layer-3 routing protocol.

### Industrial Ethernet Ring with Zero Delay and Zero Packet Loss

Supports industry-level EAPS and their protection shift time is less than 50ms. Their high reliability is represented by the null packet loss, which has been proved by many years of application in the Grid, rail transportation and defense systems.

### Telecom-Level Ethernet Switch

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.

Support Ethernet standard 802.3u, 802.3x, 802.3ad, 802.1d, 802.1p, 802.1q, 802.1w, 802.1ad.

Support system status LED, port dynamic LED.

Provides the perfect Ethernet OAM mechanism to monitor the network running status in real time for rapid trouble locating and detection.

Supports 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.

Supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade.

Supports various L2 multicast functions, including IGMP-Snooping, fast-leave and trans-vlan multicast copy.

### Flexible and Convenient Management and Maintenance

Supports management modes such as the console port, Telnet, SSH, etc.  
Supports the WEB management mode, which is easy and efficient so that it makes installation and debugging convenient.

### Perfect Security Mechanisms

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.

Supports perfect security authentication mechanisms: IEEE802.1x, Radius and Tacacs+  
Supports storm/multicast/unicast limit to ensure the normal running of equipment in harsh network conditions.

Supports a perfect ring detection mechanism to ensure the long-term stable running of network. Supports port isolation within the same VLAN, DHCP Snooping and IP plus MAC plus Port binding for ensuring user data security.

## Product Characteristics

### VLAN

4K Active VLAN, QinQ & Selective QinQ, GVRP, Private VLAN, Voice VLAN

### Spanning Tree

802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)  
BPDU guard, root guard and loopback guard

### Multicast

IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter

### IP

Static route,  
IPv4/v6 dual stack

### IPv6

ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet  
IPv6 neighbor discovery, Path MTU discovery  
MLD V1, MLD snooping IPv6  
Static Routing, RIPng, OSPFv3  
Manual tunnel, ISATAP tunnel, 6 to 4 tunnel

### Certification

CE, FCC, ROHS

### QoS

CAR, HQoS, MAC/IP/TCP/UDP/VLAN/COS/DSCP/TOS based QoS, 802.1P/DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED, flow monitoring and traffic shaping

### Security

Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky  
DHCP Snooping and option 82, DAI & IP source guard, PPPoE+,  
IEEE 802.1x, Radius and Tacacs+  
L2/L3/L4 ACL flow identification and filtration  
Anti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc. Broadcast/multicast/unknown unicast storm-control  
MD5, SHA-256, RSA-1024, AES256, etc.

## Product Characteristics

### DHCP

DHCP server/relay/client  
DHCP snooping/option82

### Reliability

Static/LACP link aggregation, Interface backup  
EAPS and ERPS  
ISSU uninterrupted system upgrade  
VRRP  
UDLD

### Management

Console, Telnet, SSH v1/2, HTTP, HTTPS,SNMP v1/v2/v3, RMON  
TFTP, FTP, SFTP  
NTP  
ZTP  
SPAN, RSPAN

### Environment

Operating temperature/ humidity: 0°C -50°C ,10%-90% non-condensing  
Storage temperature/humidity:  
-20°C -70°C , 5%-95% non-condensing

### Accessories

Power cord, rackmount kits, console cable

## Product Specifications

Gigabit Interface	RJ45 : 8
10GE/GE Interface	4
Console (RJ45)	1
Backplane (Gbps)	128
Forwarding rate (Mpps with 64 bytes)	72
Chassis	Dimensions (WxDxH) (mm): 280x180x44 Weight (Kg) (empty): 1.3
Package	Dimensions (WxDxH) (mm): 350x268x94 Weight (Kg) (empty): 2.3
Power consumption	No-load: <22W Full-laod: 35W
Power supply	AC: 100-240V DC: 36-72V
Total output BTU (1000BTU/H=293W)	153.58

## Product Specifications

Noise @25 °C (dBA)	0
MTBF (H)	>200.000
Forwarding Mode	Store-forward
Flash (MB)	16
DRAM (MB)	256
MAC	16K
Buffer Size (MB)	1.5
Interface vlan	64
Routing table	512
Jumbo frame	9K

## Ordering Information

Part #	Description
<b>SWM-2800-8T4X-A</b>	8-Port Gigabit RJ45 + 4-Port 10GE SFP+ L3-lite Managed Switch (single AC-220V power supply; fanless, 1U, standard 19-inch rack-mounted installation)



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