LA-SWM3-DC10G0448P

Managed Switch 4x10GBase-X, 8xGE SFP/Base-T Combo, 16x10/100/1000 Base-T Support 16xPoE

Highlight Information ▶▶▶▶

Supports Maximum 48

GE TX Ports and 4× 10GE

SFP+ Uplink Ports

Advanced Hardware

Architecture and

Industry-leading Port

Density

Carrier-Level High

Reliability

Layer-3 Routing

Function

Varied Service

Characteristics

Versatile IPv6

Solution Complete

Security Mechanism

▌ Introduction

LA-SWM3-DC10G0448P is a new-generation intelligent 10GE aggregation level switch designed for carrier's IP MAN and enterprise networks. Based on the new-generation high-performance hardware, it supports functions such as ACL, QinQ and QoS. Its simple management mode and flexible installation can meet the requirement of any complicated scenarios.

▌ Characteristic

Carrier-Level Ethernet Access Switch

- The carrier-level Ethernet- ring protection protocol with less than 50ms recovery time, STP/RSTP/MSTP, backup uplink ports, and LACP link aggregation to cater to the requirements of high reliability of carriers;

- Has powerful ACL functions to access and control L2-L7 data based on physical port, providing carriers flexible and various policy control methods;

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

- Various L2 multicast functions such as IGMP-snooping, fast-leave and MVR to fully meet the operation requirements of carrier's IPTV.

Comprehensive IPv6 Solutions

- The IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6 and Path MTU discovery.

- Ping, Traceroute, Telnet, SSH and ACL on the basis of IPv6, meeting IPv6 networks' equipment management requirements and service control requirements;

Enhanced QoS

- 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.

- 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.

- Storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.

- Perfect ring detection mechanism, ensuring the long-term stable running of network.

- Port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding

Easy Management and Maintenance

- Many management modes such as the CLI, Telnet, SSH, SSL and SNMP.

- WEB management mode, which is easy and efficient for installing and debugging the device.

- FTP, TFTP and SFTP.

- ISSU (In-Service Software Upgrade).

- Zero Touch Provisioning (ZTP) function to minimize manual operator intervention and helps reduce customers' initial deployment costs.

Features

- **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 loop-back guard

- **Multicast**: IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter

- **IP**: Static route, IPv4/v6 dual stack

- **Accessories**: Power cord, rackmount kits, console cable

- **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 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.

- **Reliability**: Static/LACP link aggregation, Interface backup EAPS and ERPS, ISSU uninterrupted system upgrade

- **Management**: Console, Telnet, SSH v1/2, HTTP, HTTPS SNMP v1/v2/v3, RMON TFTP, FTP, SFTP NTP ZTP (Zero Touch   Provisioning), 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

- **Certification**: CE, FCC, ROHS

Specification

PART NO	LA-SWM3-DC10G0448P
Interface	48 GE PoE ports, 4×10GE/GE SFP+ ports
Console	1 RJ45
Backplane	176 Gbps
Forwarding rate	132 Mpps
Total output BTU (1000BTU/H=293W)	1347.44
Fan number	2
Noise@25°C(dBA)	45
MTBF(H)	>50,000
Forwarding mode	Store-forward
Flash (MB)	16
DRAM (MB)	256
MAC	32K
Buffer size (MB)	4
Jumbo frame	9K
Total SVI	10
Power supply	AC:100V-240V,50Hz±10%; 400W
Power consumption	
No-load	<30W
Full-load	394.8W
Chassis	
Dimensions (W x D x H) (mm)	440*280*44
Weight (KG)(empty)	4.3
Package	
Dimensions (W x D x H) (mm)	576*448*94
Weight (KG)	5.5

■ Ordering Information

PART NO	DESCRIPTION
LA-SWM3-DC10G0448P	Ethernet switch with 48 GE POE ports and 4 10GE ports (1 console port, 48 GE POE ports, 4 10GE/GE SFP+ ports; 1 AC220V and 1 DC power supply, AC 740W POE power, or DC 740W POE power, the cooling fan, 1U, standard 19-inch rack-mounted installation)
Optical Modules	
10GE Optical Modules	
LA-SFP+TX	10GE SFP+-to-RJ45 module
LA-SFP+SX	10GE SFP+ multi-mode (300m, 850nm, LC)
LA-SFP+LX-10	10GE SFP+ single-mode (10Km, 1310nm, LC, DDM
LA-SFP+LX-20	10GE SFP+ single-mode (20Km, 1310nm, LC, DDM)
LA-SFP+LX-40	10GE SFP+ single-mode (40Km, 1310nm, LC, DDM)
LA-SFP+LX-80	10GE SFP+ single-mode (80Km, 1550nm, LC, DDM)
LA-SFP+LX-SM1270/1330-10	10GE SFP+ single-mode, single-fiber (10Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single-mode, single-fiber (10Km, TX1330/RX1270, LC, DDM)
LA-SFP+LX-SM1270/1330-20	10GE SFP+ single-mode, single-fiber (20Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single-mode, single-fiber (20Km, TX1330/RX1270, LC, DDM)
LA-SFP+LX-SM1270/1330-40	10GE SFP+ single-mode, single-fiber (40Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single-mode, single-fiber (40Km, TX1330/RX1270, LC, DDM)
GE Optical Modules	
LA-SFP-TX-B	GE-SFP-to-RJ45 module
LA-SFP-SX-D	GE SFP multi-mode (500m,850nm, LC, DDM)
LA-SFP-LX-10-D	GE SFP single-mode (10Km,1310nm, LC, DDM)
LA-SFP-LX-20-D	GE SFP single-mode (40Km, 1310nm, LC, DDM
LA-SFP-LX-40-D	GE SFP single-mode (40Km, 1310nm, LC, DDM)
LA-SFP-ZX-80-D	GE SFP single-mode (80Km, 1550nm, LC, DDM)
LA-SFP-ZX-120-D	GE SFP single-mode (120Km, 1550nm, LC, DDM
LA-SFP-LX-SM1310/1550-10BIDI	GE SFP single-mode, single fiber (10Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single fiber (10Km, TX1550/RX1310, LC, DDM)
LA-FP-LX-SM1310/1550-20BIDI	GE SFP single-mode, single fiber (20Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single fiber (20Km, TX1550/RX1310, LC, DDM)
LA-SFP-LX-SM1310/1550-40BIDI	GE SFP single-mode, single fiber (40Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single fiber (40Km, TX1550/RX1310, LC, DDM)
LA-SFP-LX-SM1490/1550-80BIDI	GE SFP single-mode, single fiber (80Km, TX1490/RX1550, LC, DDM) GE SFP single-mode, single fiber (80Km, TX1550/RX1490, LC, DDM)
LA-SFP-LX-SM1490/1550-120	GE SFP single-mode, single fiber (120Km, TX1490/RX1550, LC, DDM) GE SFP single-mode, single fiber (120Km, TX1550/RX1490, LC, DDM)