LA-SWM3-DC10G1208(2AC)

Managed Ethernet Switch with 8 x GE TX, 12 x 10GE/GE Auto-Adaptive SFP+

Highlight Information ▶▶▶▶

Supports 8GE Ports

12 10GE SFP+ Ports

Advanced Hardware

Architecture and

Industry-leading Port Density

Carrier-Level High

Reliability

Layer-3 Routing Functions

Varied Service

Characteristics Versatile

IPv6 Solution Complete

Security Mechanism

▌ Introduction

LA-SWM3-DC10G1208 is a new generation of aggregation 10GE switch targeted at the IP MAN (metropolitan area network), campus networks and enterprise networks. It is developed on the basis of high-performance hardware and software platform. It Support multiple services like IPv6, MPLS, VPN and network security based on L2/L3/L4 wire-speed switching service. It also Support nonstop upgrade, continuous forwarding, graceful restarting and redundancy protection.

LA-SWM3-DC10G1208 series virtualize multiple physical devices into one. The performance, reliability and management capabilities of the virtual system combine to outperform that of individual physical devices; The improved software makes full use of each link in the physical device cluster, which avoids STP blocking on links and protects the original link to the maximum; Based on the advanced distribution mechanism and efficient cross-physical link aggregation function, the logic control plane, service control plane and service data plane are separated. Thus, the device can support continuous layer3 routing forwarding, avoiding service interruption as a result of a single point of failure; Easy Management to realize single IP management, greatly improving the networking efficiency and lowering operating costs.

█ Characteristic

Carrier-level High Reliability

- Support STP/RSTP/MSTP, VRRP protocol, Ethernet ring protection, dual master-slave uplink protection and LACP link aggregation;
- Support ISSU (In-Service Software Upgrade);
- Support BFD mechanism;
- Support Ethernet OAM mechanism, 802.3ah, 802.1ag and ITU-Y.1731;
- High Reliability (99.999%): The MTTR of the LA-SWM3-DC10G1208 Series is 50ms, satisfying the requirement for reliable delivery of carrier-level service.

Varied Service Features

- Support layer2 and layer3 multicast routing protocol, which enable the device can access to IPTV, HD video surveillance and HD video conference;
- Support layer3 routing protocol and super-large routing table capacity, which enables the device is available in large campus networks, enterprise networks and industry networks;
- Support layer2 MPLS VPN.

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 Support level-based command line protection, endowing different levels of users with different management permissions.
- Perfect security authentication mechanisms: IEEE 802.1x, Radius and Tacacs+.
- Support storm/multicast/unicast limits, ensuring normal running conditions of the equipment when deployed in harsh network conditions.
- Support perfect ring detection mechanisms, ensuring long-term network performance stability.
- Support port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.

Versatile IPv6 Solution

- Support the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6, path MTU discovery, DHCPv6, etc;
- Support Ping, Traceroute, Telnet, SSH, ACL based on IPv6;
- Support MLD, MLD Snooping, IPv6 static routing, RIPng, OSPFv3 and BGP4+, etc;
- Support IPv6 tunnel: manual tunnel, automatic tunnel, GRE tunnel, 6to4 tunnel, ISATAP;
- Support IPv4 transiting to IPv6: IPv6 manual tunnel, automatic tunnel, 6 to 4 tunnel, ISATAP tunnel.

Innovative Energy-saving Design

- Intelligent power management: The power system supports real-time monitoring the device and the slow-start. It is also power-saving;
- Intelligent fan management system: The fan system supports automatic speed regulation, which efficiently slow the fan speed and mitigate the noise;
- Comply with the international standard IEEE 802.3az

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

- PIM-SM, PIM-DM, IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter

IPv4

- Static routing, RIP v1/v2, OSPF, BGP, PBR, ECMP
- BFD for OSPF, BGP

IPv6

- ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet
- IPv6 neighbor discovery, Path MTU discovery
- MLD V1/V2, MLD snooping
- IPv6 Static Routing, RIPng, OSPFv3, BGP4+
- Manual tunnel, ISATAP tunnel, 6 to 4 tunnels

MPLS

- LDP protocol, multi-VRF,
- MPLS L2 VPN

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.

Reliability

- Static/LACP link aggregation, Interface backup
- BVSS virtual-stacking
- EAPS and ERPS
- URPF, LLDP
- ISSU

- VRRP
- 1+1 power backup

Management

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

Accessories

- Power cord, rackmount kits, console cable

Environment

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

Certification

- CE, FCC, ROHS

▍Specification

PART NO	LA-SWM3-DC10G1208
Interface	8 x GE TX ports, 12 x 10GE/GE SFP+ ports
Console	1 RJ45 port
Backplane	176Gbps
Forwarding rate	132 Mpps
Total output BTU (1000BTU/H=293W)	170.65
Fan number	2
Noise@25℃(dBA)	57
MTBF(H)	>100,000
Forwarding mode	Store-forward
Flash (MB)	16
DRAM (MB)	512
MAC	32K
Buffer size (MB)	3
Jumbo frame	9K
Routing table	IPv4, 32K; IPv6, 8K
ARP table	IPv4, 10K; IPv6, 5K
Total SVI	1K
Power consumption	No-load < 35W

Power supply	Full-load, 50W; AC: 100V-240V, 50Hz±10% Single AC (optional for Dual Power)
Chassis Dimensions (W x D x H) (mm)	440*315*44
Package	Dimension (W x D x H) (mm): 576x448x94
Weight (KG)	4.8KGs

■ Ordering Information

PART NO	DESCRIPTION
LA-SWM3-DC10G1208	Full 10GE Ethernet Routing Switch with 12x10GE ports and 8xGE ports (1 Console port, 12x10GE/GE SFP+ ports, 8xGE TX ports; AC220V single power supply; the cooling fan, 1U, 19-inch rack-mounted installation)
LA-SWM3-DC10G1208-2AC	Full 10GE Ethernet Routing Switch with 12x10GE ports and 8xGE ports (1 Console port, 12x10GE/GE SFP+ ports, 8xGE TX ports; AC220V dual power supply; the cooling fan, 1U, 19-inch rack-mounted installation)

Optical Modules	
10GE Optical Modules	
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)
Gigabit Optical Modules	
LA-SFP-TX-B	Gigabit SFP optical ports transfers to RJ45 TX port modules
LA-SFP-SX-D	Gigabit SFP multi-mode (500m, 850nm, LC, DDM）
LA-SFP-LX-10-D	Gigabit SFP single mode (10Km, 1310nm, LC, DDM)
LA-SFP-LX-20-D	Gigabit SFP single mode (20Km, 1310nm, LC, DDM)
LA-SFP-LX-40-D	Gigabit SFP single mode (40Km, 1310nm, LC, DDM)
LA-SFP-ZX-80-D	Gigabit SFP single mode (80Km, 1550nm, LC, DDM)
LA-SFP-LX-SM1310/1550-10BIDI	Gigabit SFP single mode, single-core bidirectional (10Km, TX1310/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (10Km, TX1550/RX1310, LC, DDM)
LA-FP-LX-SM1310/1550-20BIDI	Gigabit SFP single mode, single-core bidirectional (20Km, TX1310/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (20Km, TX1550/RX1310, LC, DDM)
LA-SFP-LX-SM1310/1550-40BIDI	Gigabit SFP single mode, single-core bidirectional (40Km, TX1310/RX1550, LC, DDM) gigabit SFP single mode, single-core bidirectional (40Km, TX1550/RX1310, LC, DDM)
LA-SFP-LX-SM1490/1550-80BIDI	Gigabit SFP single mode, single-core bidirectional (80Km, TX1490/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (80Km, TX1550/RX1490, LC, DDM)