# *LA-SWM2-DCG0208P*

# Managed Ethernet Switch with 8×GE TX ports, 2×100/1000M SFP ports



# Introduction

LA-SWM2-DCG0208P is a new-generation intelligent PoE access switch designed for carrier's IP MAN and enterprise networks. Based on new-generation high-performance hardware and platform, supports functions such as ACL, QinQ and QoS. Its simple management mode and flexible installation can meet 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.

#### Intelligent PoE+

- IEEE 802.3AF/AT PoE standard, and power mapping scales up to a maximum of 370W of PoE+ power;
- Supports PoE non-stop power supply. The PoE+ power is maintained during a switch reload;
- Manual and dynamic PoE power allocation;
- Up to 2KV thunder-proof of the PoE port and power supply;



#### **Enhanced QoS**

- Priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority, better streamlining carrier's services.
- 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 and Tacacs+.
- 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.
- The WEB management mode, which is easy and efficient for installing and debugging the device.
- Supports FTP, TFTP and SFTP.
- ISSU (In-Service Software Upgrade).
- SNMP and NMS smart network management platform. The combination realizes automatic equipment discovery, network topology management, equipment configuration management, performance data statistics and analysis and trouble management.
- 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 loopback guard
- Multicast: IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter
- IP: Static route, RIP, OSPF, 512 routing table, IPv4/v6 dual stack, DHCP Server/Client/Relay
- 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 EAPS and ERPS, ISSU.
- Management: Console, Telnet, SSH v1/2, HTTP, HTTPS SNMP v1/v2/v3, RMON TFTP, FTP, SFTP NTP ZTP (Zero Touch Provisioning), SPAN, RSPAN
- **Accessories**: Power cord, rackmount kits, console cable, anti-slipping pad.
- **Environment**: Operating temperature/humidity: -10°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-SWM2-DCG0208P
Interface	$8 \times$ GE PoE ports, $2 \times 100/1000$ M SFP ports
Console	1 RJ45 port, 1 RST button
Backplane	20 Gbps
Forwarding rate	15 Mpps
PoE power budget	130W
Total output BTU (1000BTU/H=293W)	511.95
Fan number	/
Noise@25°C(dBA)	0
MTBF(H)	>50,000
Forwarding mode	Store-forward



Flash (MB)	16	
DRAM (MB)	128	
MAC	8K	
Buffer size (MB)	4.1	
Jumbo frame	9K	
Total SVI	10	
Power supply	AC:100V-240V, 50/60Hz; 150W	
Power consumption		
No-load	<7W	
Full-load	142.5W	
Chassis		
Dimensions (W x D x H) (mm)	280x180x44	
Weight (KG)(empty)	1.6	
Package		
Dimensions (W x D x H) (mm)	346x289x92	
Weight (KG)	2.4	

# Ordering Information

PART NO	DESCRIPTION
	Ethernet PoE switch with 10 GE ports (1 console port, 8 GE PoE ports, 2 $ imes$
LA-SWM2-DCG0208P	100/1000M SFP ports, 1 standard AC220V power supply, 150W fanless, 1U, rack-
	mounted installation)

Optical Modules		
100M Optical Modules		
LA-SFP-SX-1310	100M SFP multi-mode (2Km, 1310nm, LC, DDM)	
LA-SFP-LX-15	100M SFP single-mode (15Km, 1310nm, LC, DDM)	
LA-SFP-LX-40	100M SFP single-mode (40Km, 1310nm, LC, DDM)	
LA-SFP-ZX-80	100M SFP single-mode (80Km, 1550nm, LC, DDM)	
LA-SFP-LX-SM1310/1550-20BIDI	100M SFP single-mode, single fiber (20Km, TX1310/RX1550, LC, DDM)	
	100M SFP single-mode, single fiber (20Km, TX1550/RX1310, LC, DDM)	
LA-SFP-LX-SM1310/1550-40BIDI	100M SFP single-mode, single fiber (40Km, TX1310/RX1550, LC, DDM)	
	100M SFP single-mode, single fiber (40Km, TX1550/RX1310, LC, DDM)	
LA-SFP-LX-SM1310/1550-80BIDI	100M SFP single-mode, single fiber (80Km, TX1310/RX1550, LC, DDM)	
	100M SFP single-mode, single fiber (80Km, TX1550/RX1310, LC, DDM)	
GE Optical Modules		



LA-GSFP-TX-B	GE-SFP single-to-RJ45 module
LA-GSFP-SX-D	GE SFP multi-mode (500m,850nm, LC, DDM)
LA-GSFP-LX-10-D	GE SFP single-mode (10Km,1310nm, LC, DDM)
LA-GSFP-LX-20-D	GE SFP single-mode (40Km, 1310nm, LC, DDM
LA-GSFP-LX-40-D	GE SFP single-mode (40Km, 1310nm, LC, DDM)
LA-GSFP-ZX-80-D	GE SFP single-mode (80Km, 1550nm, LC, DDM)
LA-GSFP-ZX-120-D	GE SFP single-mode (120Km, 1550nm, LC, DDM
LA-GSFP-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-GSFP-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-GSFP-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-GSFP-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-GSFP-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)

