## LA-SWM3-10G0012-S

Layer 3 Managed Fiber Switch 12Port 10Gigabit SFP+



#### **Overview**

10Gigabit Layer 3 Managed Fiber Switch supports 12 x 10G Base-X SFP+ ports, as well as 1 x console port and 1 x USB serial port. The device supports automatic DoS attack defense and SNMP, IEEE 802.1, STP, RSTP, Link aggregation, and other functions. With advanced security functions and quality of service (QoS), it can be used as core layer, distribution layer, and aggregation layer switch with high density port and easy management, is an ideal choice for various business network applications.

### **Features**

- L3 management, support DHCP Server, QoS, ACL, SNMP V1/V2/V3, IGMP Snooping v1/v2;
- Support STP/RSTP/MSTP/ERPS
- Support loop detection and self-healing, remote loop-back monitoring
- Support IPV4/IPV6, RIP, OSPF
- Support multiple VLAN division, MAC VLAN, Protocol VLAN, Private VLAN
- Support IP address/MAC address/VLAN+Port binding, DHCP Snooping
- Support standard SFP optical module, no encryption, such as multi mode, single mode, SFP to RJ45 Modules
   (Default No include SFP module)

# **Specifications**

Model	LA-SWM3-10G0012-S
Fixed Port	12*100/1000/2500/10000M SFP
Console Port	1*Console
Reset Key	1
CPU	Cortex-A9 600Mhz
DDR	8G DDR3
FLASH	512Mbytes
RAM	1024Mbytes
Bandwidth	512Gbps
Packet Forwarding	190.46Mpps
MAC	16K
Buffer	2Mbit SRAM Packet Buffer
Jumbo Frame	Jumbo packets up to 9 KB
VLAN Address	4K
Link Aggregation	Supports 128 trunk groups with up to 8 members per group
L3 Routing	IPV4 supports 768K; IPV6 supports 384K
L3 Routing  QoS Queue	IPV4 supports 768K; IPV6 supports 384K
	8  10BASE-T: Cat3, 4, 5 UTP(≤250 meter) 100BASE-TX: Cat5 or later UTP(150 meter) 1000BASE-TX: Cat6 or later UTP(150 meter) SFP: 100M/1G/10G single-mode multi-mode optical module, the maximum distance is ≤120km (depending on the optical module)
QoS Queue	8  10BASE-T: Cat3, 4, 5 UTP(≤250 meter)  100BASE-TX: Cat5 or later UTP(150 meter)  1000BASE-TX: Cat6 or later UTP(150 meter)  SFP: 100M/1G/10G single-mode multi-mode optical module,
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QoS Queue  Transmission Distance  LED Indicator  Power  Operating Temp./Humidity  Storage Temp./Humidity  Product /Packing Size (L*W*H)	8  10BASE-T: Cat3, 4, 5 UTP(≤250 meter)  100BASE-TX: Cat5 or later UTP(150 meter)  1000BASE-TX: Cat6 or later UTP(150 meter)  SFP: 100M/1G/10G single-mode multi-mode optical module, the maximum distance is ≤120km (depending on the optical module)  PWR: Power LED  SYS: System indicator  1-12: 10G SFP connection indicator  AC: 100-240Vac 50-60Hz 0.6A MAX 45W  -10~+55° C; 5%~90% RH Non coagulation  -40~+75° C; 5%~95% RH Non coagulation  440mm*200mm*45mm  515mm*300mm*95mm

Certificate	3C; CE-EMC EN55032; CE-LVD EN62368; FCC Part 15 Class B; RoHS;
Warranty	1 year
Port	
Number of Fiber 10G or 1G ports	12
Port Shutdown	Support
Port Speed	Support autonegotiate, full-1000, full-100, half-100, full-10, half-10
Flow Control	Support full-duplex IEEE 802.3x, half-duplex back pressure
Storm Control	Supports rate limit for broadcast, multicast, and DLF packets
Storm Constrain  Port Mirror	Support the detection of broadcast packets, multicast packets, or unicast packets on the port, shutdown the port if the rate is over the threshold.  Support
Port Rate Limit	Support port ingress and egress rate limit
Link Aggregation	Support manual link aggregation Support LACP dynamic link aggregation Supports up to 32 aggregation groups, each group up to 8 ports Support source MAC, destination MAC, source destination MAC, source IP, destination IP, source destination IP routing strategy
Port Isolate	Support
Jumbo Frame	Support up to 16KB packet
Redundant Port	Support
MAC	
MAC Table Capacity	16K
MAC Table Management	Support
Forwarding mode	Support IVL forwarding mode
Static MAC Address	Support
MAC Address Binding	Support
MAC Address Filtering	Support
MAC Learning Control	Control the MAC learning based on port
VLAN	
Number of VLANs	4K
802.1q-based VLAN	Support
MAC-based VLAN	Support
IP-based VLAN	Support

Protocol-based VLAN	Support
Voice VLAN	Support
VLAN Mapping	Support 1:1 mapping
QinQ	Support basic QinQ Support flexible QinQ
Reliability	
Spanning Tree Protocol	Support STP/RSTP/MSTP
Port Loop Detection	Support
EAPS	Support
ERPS	Support G.8032/Y.1344
LLDP	Support LLDP & LLDP-MED
UDLD	Fully compatible with CISCO's UDLD protocol
VLLP (VRRP Layer-2 Loop Protection)	Support, Only used with VRRP
L3	
ARP	Support static and dynamic ARP
Static Route	Support
VLAN Interface	Support 32 VLAN interfaces
RIP	Support RIP v1/v2
OSPF	Support OSPFv2
Policy Route	Support
VRRP	Support
Multicast	
Static Multicast MAC Address	Support
IGMP Snooping	Support IGMP SNOOPING v1/v2/v3 Support IGMP Querier Support IGMP SNOOPING Filter
MVR	Support
GMRP	Support
ACL	
Standard IP-based ACL	Support
Extended IP based ACL	Support
MAC IP-based ACL	Support
MAC ARP-based ACL	Support

ACL Port Filtering	Support
Time-based ACL	Support
QoS	
Port Queue Number	8
Port Queue Scheduling Mode	Support WRR, RR, WDRR, SP
Port-based Classification	Support
802.1p-based Classification	Support
DSCP-based Classification	Support
ACL-based Classification	Support
QoS Policy	Support packets mapping to queue Support COS or DSCP Remarking Support rate limits of data flow Support data flow statistics Support mirroring of data flow
DHCP	
DHCP Client	Support
DHCP Snooping	Support
DHCP Relay	Support
DHCP Server	Support
DHCP Option 82	Support
Management	
CLI Management	Support Console, Telnet and SSH
WEB Management	Support HTTP and HTTPS
SNMP Management	Support SNMP v1, v2c Support SNMP TRAP Support lots of standard and private MIBs
User Management	Support multiple user management
Log Management	Support local log management Support SYSLOG
RMON	Support RMON 1, 2, 3 and 9 groups
Cluster Management	Support NDP Support NTDP Support manual and automatic joining of cluster groups Support cluster unified management
Configuration File	Support uploading and downloading configuration file
Upgrade software	Support

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Clock Management	Support local clock management Support SNTP
Security	
Switch Management Security	Support enabling and disabling TELNET, WEB and SNMP services Support TELNET, WEB and SNMP services to bind to standard IP ACLs Support for limiting the number of TELNET connections
CPU Protection	The switch's own security protection prevents large data streams from attacking the switch itself.
AAA	Support 802.1x Support RADIUS Supports authentication, authorization, and accounting through RADIUS server Support port-based and MAC-based 802.1x Support 802.1x guest VLAN
IP MAC Binding	Support static configuration of IP, MAC and port binding
DHCP SNOOPING	Support dynamic ARP binding to prevent ARP spoofing Support dynamic IP, MAC and port binding Support fixed port to connect to DHCP server to prevent private connection to DHCP server
Prevent ARP Spoofing	Support manually configuring MAC ARP-based ACL rules to prevent ARP spoofing.  Support the DHCP SNOOPING function. During the process of obtaining an IP address by DHCP, the switch dynamically binds ARP to the port to prevent ARP spoofing.
Debugging	
Ping	Support
Traceroute	Support
Telnet Client	Support

### **Ordering Information**

P/N	Description
LA-SWM3-10G0012-S	Layer 3 Managed Fiber Switch 12Port 10Gigabit SFP+