



52 full Gigabit two-layer management PoE switch

LS7700G-48P4F-L2M

Product Description

The LS7700G-48P4F-L2M management switch is a comprehensive Gigabit network management switch, which provides a new generation of high-performance hardware and software platforms, providing flexible, cost-effective full Gigabit access and upstream ports, supporting complete security protection. Mechanism, perfect ACL / QoS strategy and flexible VLAN feature, easy to manage maintenance, meet users for network equipment easy to manage, high security, low-cost networking requirements for campus, hotel and enterprise park network access, more Application scenario.

Product model and appearance



LS7700G-48P4F-L2M

- 48*10/100/1000M Self-negotiation RJ45 port (PoE power)
- 4*1000M SFP fiber
- Backplane Bandwidth : 104Gbps
- Packet Forwarding Rate : 77.38Mbps
- Rich Layer 2 network management functions

Product performance

Powerful business processing capabilities

- Support MLD Snooping, IGMP Snooping, to meet the multi-terminal high-definition video surveillance and video conference access requirements
- Support proxy ARP, so that hosts on the same network segment and different physical networks can communicate normally
- Support GVRP, realize the dynamic distribution, registration and attribute propagation of VLAN, reduce the amount of manual configuration, and ensure the correctness of the configuration
- Support IEEE 802.1Q VLAN, which can be based on the three port modes of "Access", "Trunk" and "Hybrid", which can be used by users to flexibly divide VLAN
- Support QoS, support three priority modes based on port, based on 802.1P and based on DSCP and four queue scheduling of Equ, SP, WRR, SP+WRR algorithm
- Support ACL L2 (Layer 2) ~ L4 (Layer 4) packet filtering function, through the configuration of matching rules, processing operations and time permissions to achieve the packet filtering Filter, provide flexible security access control strategy
- Support DHCP server to assign IP addresses to hosts in the network
- Support DHCP Snooping, effectively prevent private DHCP server and ensure the legality of DHCP server
- Support DHCP OPTION 82 relay, switches in different interfaces or subnets can also obtain IP addresses, reducing the number of DHCP servers
- Supports DHCP snooping, can restrict end user ports (untrusted ports) to only send DHCP requests, and discard all other DHCP from user ports Message

- Support IEEE 802.1Q VLAN, MAC VLAN, protocol VLAN, Guest VLAN, Voice VLAN, users can flexibly divide according to different needs VLAN
- Rich Layer 2 multicast functions, including static multicast group and dynamic multicast group, user quick leave mechanism function

Complete security protection mechanism

- Supports four-element binding of IP address, MAC address, VLAN and port to filter data packets
- Support ARP protection, against common gateway spoofing and man-in-the-middle attacks and other common ARP spoofing and ARP flooding attacks in LAN
- Support IP source protection to prevent illegal address spoofing including MAC spoofing, IP spoofing, MAC/IP spoofing
- Supports defenses such as DOS, distributed denial of service, spoofing, and viruses
- Support 802.1X authentication, provide authentication function for LAN computers, and control the authorization status of controlled ports according to the authentication result
- Support port security and isolation, stop learning when the number of MAC addresses learned by the port reaches the maximum number, prevent MAC address attacks and control port network traffic
- Support loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering, realize link backup and path optimization
- Support loop loop detection to reduce repeated transmission of broadcast, multicast, and unknown unicast messages by the device, resulting in a waste of network resources and even network paralysis. Effectively prevent loops and ensure the stability and security of the network
- Support port alarms, master port status, and ensure network stability

PoE power supply capability

- PoE models support the IEEE 802.3af/at PoE power supply standard to meet the PoE power supply needs of security monitoring, teleconference systems, wireless coverage and other scenarios
- Support PoE management, support total PoE output power setting, support single-port PoE output power setting, support port PoE power supply priority setting, support custom PoE power supply time
- Automatic detection and identification of standard PoE power receiving equipment, intelligent power supply, will not burn non-standard PoE power receiving equipment or ordinary equipment
- PoE models have a maximum PoE output power of 30W per port
- The PoE port supports a priority mechanism, when the remaining power is insufficient, the power supply of the high-priority port is guaranteed first

Diverse reliability protection

- Support STP/RSTP/MSTP Spanning Tree Protocol, eliminate Layer 2 loop and realize link backup
- Support link aggregation, manual aggregation, static aggregation and dynamic aggregation, based on source port, source MAC, destination MAC, source IP, destination IP, source IP port, The method of target IP port can be up to 8 aggregation groups, effectively increasing link bandwidth, realizing load balancing, link backup, and improving link reliability
- Support BPUD bridge nesting protocol, use BPDU to dynamically select root bridge and backup bridge, which can be used to eliminate bridge loop
- Supports ERPS ring network protection. When a link on the Ethernet ring network is disconnected, the communication between each node on the ring network can be quickly restored. Single-ring and multi-ring networking are available, supporting fast Speed ring network (fault self-healing time <50ms)

Loose operation and maintenance

- Support Web network management, CLI command line (Console, Telnet, SSH V1/V2), SNMP (V1/V2/V3) compatible with public MIBS and other diversified management Management and maintenance
- Support HTTPS, SSH V1/V2, SSL V3 and other encryption methods, making management more secure
- Support RMON, system log, hierarchical warning, support remote log server
- Support LLDP, which is convenient for the network management system to query and judge the communication status of the link
- Support HTTP software upgrade, configuration management
- Support CPU monitoring and memory monitoring
- Support electrical port test, optical module information detection
- Support HTTP, TFTP software upgrade, configuration management

Hardware specifications

Model	LS7700G-48P4F-L2M
Downlink ports	48*10/100/1000M Adaptive RJ45 ports
Uplink ports	4*1000M SFP fiber
PoE standard power supply	IEEE 802.3at、IEEE 802.3af
Maximum output power	450W
LED indicator	PWR, Link / Act

transmission mode	IEEE802.3 full duplex flow control and backpressure half duplex flow control
Bandwidth	104Gbps
Packet Forwarding Rate	77.38Mpps
MAC address table	32K
CPU	1GHZ
RAM	4Gb
ROM	32MB
Standard protocol	IEEE802.3i 10 BASE-TX IEEE802.3u 100 BASE-TX IEEE802.3ab 1000 BASE-T IEEE802.3z 1000 BASE-LX IEEE802.3x Flow Control IEEE802.1p IEEE802.1x IEEE802.1d IEEE802.1s IEEE802.3az EEE
Power supply	AC 100~240V 50/60HZ
Size	440mm × 360mm × 44mm
working temperature	Working Temperature: 0℃~45℃, Humidity: 10% ~ 90% Storage Temperature: - 20℃~70℃, Humidity: 5% ~ 95%

Software specifications

Hardware watchdog	stand by
PoE management	Support PoE total power settings Support single port PoE power settings Support port PoE power supply priority design Support custom PoE power supply time
Loop protection	Support ERPS ring protection Support 50MS loop since healing Support BPDU protection, root protection and loopback protection
Link aggregation	Support link aggregation (LACP) Support static polymerization, dynamic aggregation Support for maximum support for 8 aggregation groups Support for source port, source MAC, destination MAC, source IP, destination IP, source IP port, destination IP port

Summing tree (STP)	Support STP (IEEE 802.1D), Support RSTP (IEEE 802.1W) Support edge port Support spanning tree BPDU packet statistics Support root bridge protection, TC protection, BPDU protection, BPDU filtering
DHCP	Support DHCP server Support DHCP Snooping Support Option82;
VLAN	Support 802.1q VLAN Maximum support 4094 Support QinQ Support Mac VLAN Support GVRP protocol Support GMRP protocol Support 1: 1 and N: 1 VLAN mapping function Support three port modes: Access, Trunk, and Hybrid, Translation, QinQ Including the foundation in Qinq and flexible in QinQ
Security feature	Based on user grading management and password protection Support for port numbers, IP addresses, MAC addresses limit users access Support HTTPS, SSH V1 / V2, SSL V1 / V2 Support IP-Mac-Port-VLAN binding Support ARP protection, IP source protection, DOS protection Support DHCP Snooping, DHCP Attack Protection Support 802.1x certification, Support port security, port isolation Support port alarm
Access Control (ACL)	Supports L2 (Layer 2) ~ L4 (Layer 4) package filter function Support port mirror, port redirection, flow rate, QoS heavy mark Support Mac ACL Support IP ACL
Service quality (QoS)	Support 8 port queues Support port priority, 802.1p priority, DSCP priority Support SP, WRR, WFQ priority scheduling algorithm
Multicast	Support fast leaving mechanism Support static multicast group, dynamic multicast group Support IGMP Snooping Support multicast filtering, packet statistics, unknown multicast discard

Management and maintenance	Support Web network management (HTTP, HTTPS, SSL V3, TLS V1) Support CLI (Telnet, SSH V1 / V2, local serial port) Support SNMP V1 / V2 / V3, compatible public MIBS Support LLDP, RMON Support SNTp Support CPU monitoring, memory monitoring Support system log, hierarchical warning, support remote log server Support port alarm Support HTTP software upgrade, configuring backup import Support TFTP upgrade
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Product Description

LS7700G-48P4F-L2M	48*10/100/1000M RJ45 ports+ 4*1000M SFP fiber
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10/100/1000MOptical fiber module

GSFP-LX40	LC	10/100/1000M	Dual fiber, single mode , 40Km,1310nm
GSFP-LX20/13	LC	10/100/1000M	Single fiber, single mode , 20Km,1310nm
GSFP-LX20/15	LC	10/100/1000M	Single fiber, single mode , 20Km,1550nm