



52 Ports Full Gigabit L3 Managed Ethernet Switch

LSS7700G-48T4F-L3M

Product Description

LSS7700G-48T4F-L3M 52-port full Gigabit managed switch is a convergent switch independently developed by Kedi Communication. It adopts a new generation of high-performance hardware and software platform. It provides 48 Gigabit RJ45 ports and supports 4 SFP optical ports. Distance cascading convergence, providing flexible full Gigabit access and cost-effective Gigabit uplink ports, supporting Layer 2 routing protocols, complete security protection mechanisms, complete ACL/QoS strategies and rich VLAN functions, easy to manage and maintain, It is suitable for the core or aggregation layer of medium and large networks such as enterprises and parks.

Product model and appearance



LSS7700G-48T4F-L3M

- 48*10/100/1000M Self-negotiation RJ45 port
- 4*1000M SFP fiber
- Backplane Bandwidth : 256Gbps
- Packet Forwarding Rate : 77.38Mpps
- 3-layer network management function

Product performance

Powerful business processing capabilities

- Support IGMP Snooping to meet multi-terminal HD video surveillance and video conferencing access needs
- Support the OSPF dynamic routing protocol, solve the routing routing problem after large complex network partition subnet, simplifying network configuration
- Supports RIP V1 / V2 dynamic routing protocols, solving the routing routing problem after small and medium network distribution subnet, simplifies network configuration
- Support static routing, administrators manually configure routing entries, implement communication between different network segments, simple, efficient, and reliable
- Support the agent ARP, so that the host in different physical networks in the same network segment can communicate normally
- Support GVRP, implement VLAN dynamic distribution, registration, and attribute propagation, reduce manual configuration, to ensure correctness
- Support IEEE 802.1Q VLAN, can be based on "Access" "Trunk" and "Hybrid" three port modes, users can be flexible to divide VLAN
- Support QoS, support port, based on 802.1p and DSCP-based three priority patterns and SP, WRR, WFQ four queue scheduling algorithm
- Support ACL L2 (Layer 2) ~ L4 (Layer 4) Packet Filtering Function, enabling the data packet by configuring matching rules, processing operations, and time permissions Filter, providing flexible security access control

policies

- Support DHCP server to assign IP addresses for hosts in the network
- Support DHCP Snooping, effectively eliminate private DHCP servers to ensure legality of DHCP servers
- Support for DHCP Option 82 relays, the switch in different interfaces or subnets can also get the IP address, reduce the number of DHCP servers
- Supports DHCP listening, restricting end user ports (non-credit ports) can only send DHCP requests, and discard all other DHCPs from the user port. Packet
- Support IEEE 802.1Q VLAN, Mac VLAN, up to 4094 VLANs, users can flexibly divide VLANs according to different needs
- Rich two-layer multicast features, including static multicast groups and dynamic multicast groups, users quickly leave mechanism

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

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	LSS7700G-48T4F-L3M
Downlink ports	48*10/100/1000M Adaptive RJ45 ports
Uplink ports	4*1000M SFP fiber
LED indicator	PWR, Link / Act
CPU	RTL9311
RAM	4Gbit
Flash	256Mbit
transmission mode	IEEE802.3 full duplex flow control and backpressure half duplex flow control
Bandwidth	256Gbps
Packet Forwarding Rate	77.38Mpps

MAC address	32K
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°C~45°C, Humidity: 10% ~ 90% Storage Temperature: - 20°C~70°C, Humidity: 5% ~ 95%

Software specifications

routing	Support OSPF dynamic route Support RIP V1 / V2 dynamic route Support static route Support ARP proxy
Loop protection	Support ERPS ring protection Support 50MS loop since healing Support BPDU protection, root protection and loopback protection
Summing tree (STP)	Support STP (IEEE 802.1D), Support RSTP (IEEE 802.1W) Support MSTP (IEEE 802.1s) Support loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering
DHCP	Support DHCP server Support DHCP relay Support DHCP Snooping Support Option, Option82
VLAN	Support 4K VLAN Support 802.1Q VLAN, Mac VLAN, protocol VLAN, Private VLAN Support Guest VLAN, Voice VLAN Support GVRP protocol Support 1: 1 and N: 1 VLAN mapping function

MAC address table	<p>Follow IEEE 802.1D standard</p> <p>Support MAC address automatic learning and aging</p> <p>Support static, dynamic, filter address table</p>
Security feature	<p>Based on user grading management and password protection</p> <p>Support for port numbers, IP addresses, MAC addresses limit users access</p> <p>Support HTTPS, SSL V3, TLS V1, SSH V1 / V2</p> <p>Support IP-MAC-Port-VLAN quarter binding</p> <p>Support ARP protection, IP source protection, DOS protection</p> <p>Support DHCP Snooping, DHCP Attack Protection</p> <p>Support 802.1x certification, AAA</p> <p>Support RADIUS</p> <p>Support TACACS +</p> <p>Support port security, port isolation</p> <p>Support CPU protection</p>
Access Control (ACL)	<p>Supports L2 (Layer 2) ~ L4 (Layer 4) package filter function</p> <p>Provide a source MAC address, destination MAC address, source IP address, destination IP address, TCP / UDP protocol source / destination port number, protocol, and VLAN package filtering function</p> <p>Support port mirror, port redirection, flow rate, QoS heavy mark</p> <p>Support IPv4, IPv6ACL</p>
Service quality (QoS)	<p>Support 8 port queues</p> <p>Support port priority, 802.1p priority, DSCP priority</p> <p>Support WRR, strict priority scheduling algorithm</p>
Multicast	<p>Support IGMP V1 / V2 / V3 Snooping</p> <p>Support MLD V1 / V2 Snooping</p> <p>Support fast leaving mechanism</p> <p>Support multicast VLAN</p> <p>Support multicast filtering, packet statistics, unknown multicast discard</p>
Management and maintenance	<p>Support Web network management (HTTP, HTTPS, SSL V3, TLS V1)</p> <p>Support CLI (Telnet, SSH V1 / V2, local serial port)</p> <p>Support SNMP V1 / V2 / V3, compatible public MIBS</p> <p>Support LLDP, RMON</p> <p>Support CPU monitoring, memory monitoring</p> <p>Support system log, grading warning</p> <p>Support ping, traceroute detection, UDLD</p> <p>Support electrical port test, optical module information detection</p> <p>Support HTTP, TFTP software upgrade, configuration management</p>

Product Description

LSS7700G-48T4F-L3 M	48*10/100/1000M RJ45 ports + 4*1000M SFP fiber
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10/100/1000M Optical 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