

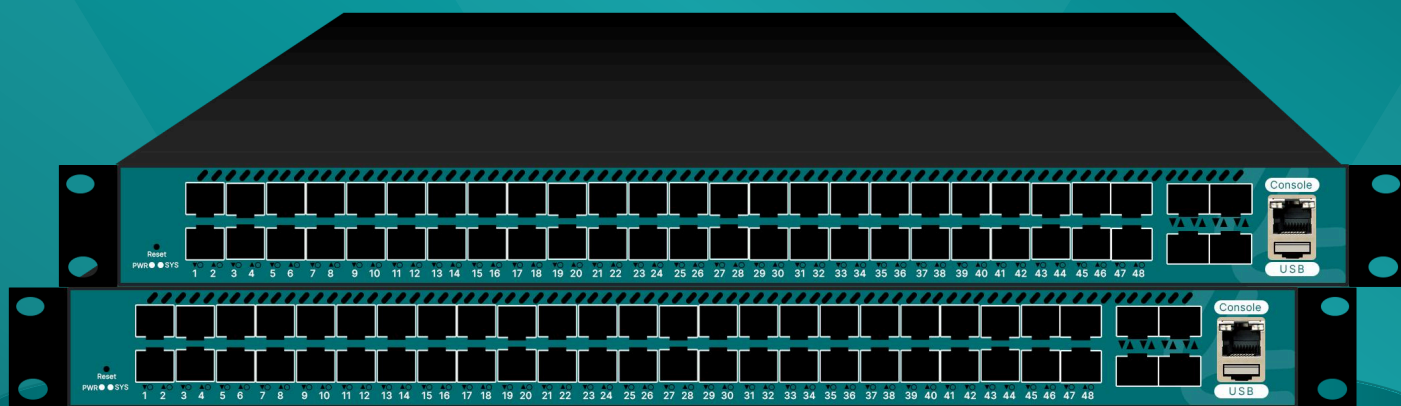


LM-4804XS-SFP+L3

DATASHEET

52-port 10G Uplink L3 Managed Ethernet Fiber Switch

The LM-4804XS-SFP+L3 is a 10G uplink L3 managed Ethernet fiber switch independently developed by Lanmus. It has 48 * 100/1000 Base-X SFP ports and 4 * 1/10G SFP+ fiber slot ports. Each port can support wire-speed forwarding.



Product Introduction

52-port 10G Uplink

L3 Managed Industrial Ethernet Fiber Switch

Product Overview

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The LM-4804XS-SFP+L3 has L3 network management function, supports IPV4/IPV6 management, dynamic routing full line-speed forwarding, complete security protection mechanism, perfect ACL/QoS policy, and rich VLAN functions, easy to manage and maintain. With industry-leading ring network technology. It supports variety of industrial-grade redundant ring network protocols, and each port can form a ring network, supporting chain ring network, starring network, coupled ring network, self-healing within ERPS <20ms of the ring network. The switches series has high reliability, high security, and high manageability, ensures reliable transmission of key data, supports remote management. The product completely follows the industrial product design and materials. The shell is made of aluminium alloy material to enhance heat dissipation. IT has excellent adaptability to the industrial site environment (including mechanical stability, climate environment adaptability, electromagnetic environment adaptability, etc). Supports AC+DC dual redundant power supply, 3 years warranty. It is suitable for intelligent transportation, rail transit, power industry, mining petroleum, and industrial scenes such as shipping, metallurgy, and green energy construction from a cost-effective, stable, and reliable communication network.

Highlight Features

Gigabit access, 10G uplink

- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Supports Gigabit Fiber ports and 10G SFP+ uplink port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

Product Introduction

Security

- Support port isolation.
- Support port broadcast storm suppression.
- Support IP+MAC+port+VLAN quadruple flexible combination binding function.
- Support 802.1X authentication to provide authentication functions for LAN computers, and control the authorization status of controlled ports according to the authentication results.

Strong business processing capability

- Support ERPS ring network and STP/RSTP/MSTP to eliminate layer 2 loops and realize link backup.
- Support IEEE802.1Q VLAN, Users can flexibly divide VLAN, Voice VLAN, and QinQ configuration according to their needs.
- Support static and dynamic aggregation to effectively increase link bandwidth, realize load balancing, link backup, and improve link reliability.

Load balancing, link backup, and improve link reliability

- Support QoS, port-based, 802.1P-based and DSCP-based three priority modes and four queue scheduling algorithms: Equ, SP, WRR, and SP+WRR.
- Support ACL to filter data packets by configuring matching rule processing operations and time permissions, and provide flexible security access control policies.
- Support IGMP V1/V2/V3 multicast protocol, IGMP Snooping meets multi-terminal high-definition video surveillance and video conference access requirements.

Stable and reliable

- CE & RoHS.
- Low power consumption, No fan, aluminum shell.
- The user-friendly panel can show the device status through the LED indicator of PWR & Link.
- Self-developed power supply, high redundancy design, providing a long term and stable power output.

Product Introduction

Easy operation and maintenance management

- Support CPU monitoring, memory monitoring, Ping detection, cable length detection.
- Support HTTPS, SSLV3, SSHV1/V2 and other encryption methods, making management more secure.
- Support RMON, system log, and port traffic statistics to facilitate network optimization and transformation.
- Support LLDP to facilitate the network management system to query and judge the communication status of the link.
- Support Web network management, CLI command line (Console, Telnet), SNMP (V1/V2/V3) and other diversified management and maintenance.

Specification

MODEL	LM-4804XS-SFP+L3
INTERFACE CHARACTERISTICS	
Fixed Port	48 * 100/1000 Base-X SFP ports 4 * 1/10G uplink SFP+ ports 1 * Console port
Ethernet Port	Port 1-48 support 10/ 100/ 1000Base-T(X) auto-sensing, full/half duplex MDI/MDI-X self-adaption
SFP Slot Port	1/10G SFP+ optical fiber port, default no include optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Wavelength/Distance	Multi-mode: 850nm / 0-550M(1G), 850nm /0-300M(10G), Single-mode: 1310nm / 0-40KM, 1550nm / 0- 120KM.

CHIP PARAMETER	
Network Management Type	L3

SPECIFICATION

MODEL	LM-4804XS-SFP+L3
CHIP PARAMETER	
Ring network	Supports ERPS ring network function, convergence time of<20ms
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3ae10GBase-LR/SR, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Exchange capacity	176Gbps
Packet forwarding rate	131Mpps
Flash	16 MB
RAM	512 MB
MAC	16K
LED Indicator	• Power Indicator Light • System indicator • Fiber Indicator Light • 10G Fiber Indicator • P : 1 Green • S : 1 Green • 1-48 : 1 Green • X1-X4 : 1 Green
Reset Switch	Yes, Press and hold the reset switch for 10s and release it to restore the factory settings
POWER	
Dual power supply	AC 100-240V 50/60Hz ; DC 36V~72V

SPECIFICATION

MODEL	LM-4804XS-SFP+L3
CERTIFICATION & WARRANTY	
Lightning Protection	Lightning protection: 6KV 8/20us; Protection level: IP40 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~ 1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable: ±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m , 1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4- 10(damped oscillation):30A/m 1MHz IEC61000-4- 12/ 18(shockwave):CM 2.5kV,DM 1kV IEC61000-4- 16(common-mode transmission):30V; 300V, 1s FCC Part 15/CISPR22(EN55022):Class B IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CE mark, commercial, CE/LVD EN62368- 1, RoHS
PHYSICAL PARAMETER	
Operation TEMP / Humidity	20~+55°C, 5%~90% RH Non condensing
Storage TEMP /Humidity	20~+55°C, 5%~95% RH Non condensing
Dimension (L * W * H)	440mm * 314mm * 44mm
Installation	Desktop, 19 inch 1U cabinet installation

SPECIFICATION

MODEL	LM-4804XS-SFP+L3
NETWORK MANAGEMENT FEATURES	
L3 Function	Support L3 network management function Supports IPV4 dynamic routing RIPv1/v2、OSPFv2 Supports IPV4/IPV6 static routing/default routing, each supporting a maximum of 128 entries Supports three-layer routing forwarding, supports communication between different network segments and VLANs
Port configuration	Auto-negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor Traffic statistics
Link Aggregation	Static link aggregation LACP Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLAN MAC VLAN Voice VLAN 802.1ad Q-in-Q tunneling Private VLAN (Protected port) GARP/GVRP
ACL	256ACLs L2, L3 e L4 Time-based ACL
Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter

SPECIFICATION

MODEL	LM-4804XS-SFP+L3
NETWORK MANAGEMENT FEATURES	
Ring Protection	<20ms G.8032 ERPS Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN
QoS	port-based CoS 802.1p-based CoS DSCP-based Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port
DHCP	SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration Backup/Reload Dual Firmware LLDP
Security Features	Port Security MAC address filter ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection DoS (Denial of Service) Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type; 802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication RADIUS Authentication DHCP Filter Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2 Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection

SPECIFICATION

MODEL	LM-4804XS-SFP+L3
NETWORK MANAGEMENT FEATURES	
Other Features	DNS Client DHCP Relay DHCP Client DHCP Snooping DHCP Option 82 SNTP Client UDLD
Maintenance	Cable Diagnostics Ping SFP DDM(Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring



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