



LM-4804XFMGP-L3

DATASHEET

Managed PoE Switch 48 * 1G RJ45 Port with 4 * 10G SFP+

The LM-4804XFMGP-L3 is a 10G uplink L3 managed PoE switch designed for high-density enterprise and industrial networking environments, featuring 48 * 10/100/1000 Base-T PoE ports and 4 * 1/10G SFP+ fiber ports with IEEE802.3af/at PoE support of up to 30W per port.



PRODUCT INTRODUCTION

Product Overview

The LM-4804XFMGP-L3 is a 10G uplink L3 managed PoE switch independently developed by Lanmus. It has 48 × 10/100/1000 Base-T PoE ports and 4 × 1/10G SFP+ fiber ports. Port 1-48 can support IEEE802.3af/at standard PoE power supply, with a power supply of 15.4W per port and a maximum power of 30W per port.

As a PoE power supply device, it can automatically detect and recognize the power receiving equipment that meets the standard and supply power through the network cable. It can supply power to PoE terminal equipment such as wireless AP, webcam, VoIP phone, building visual access control intercom, etc. through a network cable to meet the network environment that needs high-density PoE power supply.

The LM-4804XFMGP-L3 features L3 network management capabilities, supports IPV4/IPV6 management, boasts dynamic routing with full line-rate forwarding, a comprehensive security protection mechanism, sophisticated ACL/QoS policies, and rich VLAN functionality, making it easy to manage and maintain.

This series of switches offers high reliability, high security, and high manageability, ensuring reliable transmission of critical data and supporting remote management. The product fully complies with industrial product design specifications and material standards.

The enclosure is made of metal material and features fan cooling. It exhibits excellent performance in adapting to industrial field environments, including mechanical stability, climate environmental adaptability, and electromagnetic environmental adaptability.

It comes with a 3-year warranty. It is suitable for network access, convergence, and core application scenarios in campus, hotel, and enterprise park networks.

Highlight Features

Gigabit Access With 10G Uplink

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

Intelligent PoE Power Supply

- 48 * 10/100/1000 Base-T PoE ports can support PoE power supply to meet the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.
- IEEE802.3af/at PoE standard, without damaging non-PoE devices.
- Priority system for PoE port, it will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.

Strong Business Processing Capability

- IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and QinQ configuration.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- ACL, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- IGMP V1/V2 and IGMP Snooping.
- ERPS/STP/RSTP/MSTP.
- Static and dynamic aggregation.

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Security

- 802.1X authentication.
- Port isolation, Storm control.
- IP-MAC-VLAN-Port binding.

Stable And Reliable

- Low power consumption, with fan, Steel alloy shell.
- Self-developed power supply, high redundancy design, providing a long term and stable PoE power output.
- CE, RoHS.
- The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A, PoE.

Easy Operation And Maintenance Management

- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).
- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.

SPECIFICATION

MODEL	LM-4804XFMGP-L3
INTERFACE CHARACTERISTICS	
Fixed Port	48 * 10/100/1000Base-T RJ45 ports 4 * 1/10G uplink SFP+ ports 1 *Console port 1 * USB port

SPECIFICATION

MODEL	LM-4804XFMGP-L3
INTERFACE CHARACTERISTICS	
wisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤ 100 meters) 100BASETX: Cat5 or later UTP(≤ 100 meters) 1000BASE-T: Cat5e or later UTP(≤ 100 meters)
SFP Slot Port	Gigabit SFP optical fiber port and 10G SFP+ optical fiber port, default no include optical modules (optional order single-mode / multi-mode, single fiber/ dual fiber optical module. LC)
Ethernet Port	Port 1-48 support 10/ 100/ 1000Base-T(X) auto-sensing, full/half duplex MDI/MDI-X self-adaption
SFP Port Expansion	Turbo overclocking 2.5G optical module and ring
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
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100BaseTX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3ae10GBase-LR/ SR, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	176Gbps
Buffer Memory	131Mpps
MAC	32K

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CHIP PARAMETER	
LED Indicator	- Power IndicatorLight P : 1 Green - System indicator SYS : 1 Green 10G Fiber Indicator Light 49-51 : 1 Green (Link,SDFED) - On the RJ45 seat 1-48 - Yellow: Indicate PoE 1-48 - Green: Indicates network working status
Reset	Yes, Press and hold the reset switch for 5s and release it to restore the factory settings
POWER	
PoE Port	Port 1 to 48 IEEE802.3af/at
Power Supply Pin	Default 1/2 (+), 3/6 (-)
Max Power Per Port	15.4W per port, with a maximum power of 30W per port
Total PWR	450W
Power Supply	AC100-240V 50/60Hz
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)

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CERTIFICATION & WARRANTY	
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~+75°C;5%~95% RH Non condensing
Dimension	440mm* 300mm*44mm
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

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NETWORK MANAGEMENT FEATURES	
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 G
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

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NETWORK MANAGEMENT FEATURES	
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
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 Monito



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