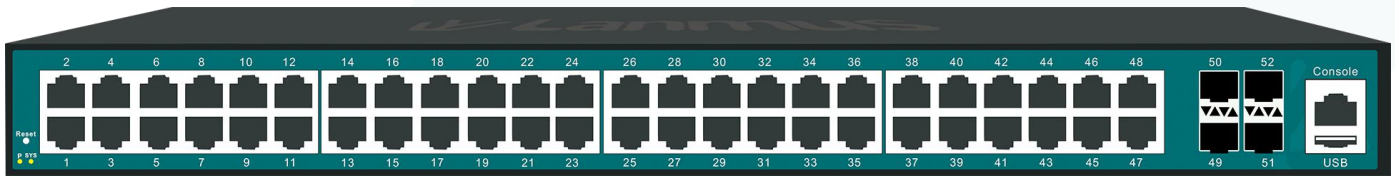


## LM-4804XFMGP-L3



### OVERVIEW

The LM-4804XFMGP-L3 is a 10G uplink L3 managed PoE switch independently developed by LANMUS. It has 48\*10/100/1000Base-T RJ45 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 network.

The LM-4804XFMGP-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 support savariety of industrial-grade redundant ring network protocols, and each port can form a ring network, supporting chainringnetwork, starringnetwork, doublestarringnetwork, ringnetwork, tangent network ring network, intersecting ring 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 metal material to enhance heat dissipation. It has excellent adaptability to the industrial site environment (including mechanical stability, climate environment adaptability, electromagnetic environment adaptability, etc.). Protection level reaches IP40, 3years warranty. It is suitable for campus, hotel and enterprise Campus network network access, convergence and core application scenarios.

## FEATURE

### Gigabit access, 10G uplink

- Supports Gigabit Ethernetport and 1000Base-X 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/ 1000Base-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.

### Security

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

### Strong business processing capability

- IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and **Q-in-Q** configuration.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- ALC, 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.

### 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.
- CCC, CE, FCC, 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.

# LM-4804XFMGP-L3

Model	LM-4804XFMGP-L3
<b>Interface Characteristics</b>	
Fixed Port	4* 1/ 10G uplink SFP+ ports 48* 10/ 100/ 1000Base-T RJ45 ports 1*Console port 1*USB port
Ethernet Port	Port 1-48 support 10/ 100/ 1000Base-T(X) auto-sensing, full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: 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)
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.
<b>Chip Parameter</b>	
Network Management Type	L3
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)
Switching Capacity	176Gbps
Buffer Memory	131Mpps

# LM-4804XFMGP-L3

MAC	32K	
LED Indicator	PowerIndicatorLight	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
1-48Green: Indicates network working status		
Reset	Yes, Press and hold the reset switch for 10s and release it to restore the factory settings	
<b>Power</b>		
PoE Por	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	960W	
Power Supply	AC100-240V 50/60Hz	
<b>Certification &amp; Warranty</b>		
Lightning Protection	<p>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)</p>	

# LM-4804XFMGP-L3

Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CCC, CE mark, commercial, CE/LVD EN62368- 1, FCC Part 15 Class B, RoHS
<b>Physical Parameter</b>	
Operation TEMP / Humidity	-20~+55°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-20~+75°C;5%~95% RH Non condensing
Dimension (L*W*H)	440mm* 300mm*44mm
Installation	Desktop, 19 inch 1U cabinet installation
<b>Network Management Features</b>	
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

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MAC Table	<ul style="list-style-type: none"> <li>Aging Time</li> <li>Static MAC address</li> <li>Dynamic MAC address management</li> </ul>
VLAN	<ul style="list-style-type: none"> <li>4094 Active VLANs</li> <li>4094 VID</li> <li>802.1Q Tag VLAN</li> <li>Port VLAN</li> <li>Protocol VLAN</li> <li>MAC VLAN</li> <li>Voice VLAN</li> <li>802.1ad Q-in-Q tunneling Private VLAN (Protected port) GARP/GVRP</li> </ul>
ACL	<ul style="list-style-type: none"> <li>256ACLs</li> <li>L2, L3 e L4</li> <li>Time-based ACL</li> </ul>
Spanning tree	<ul style="list-style-type: none"> <li>802.1D Spanning Tree Protocol (STP)</li> <li>802.1w Rapid Spanning Tree Protocol (RSTP)</li> <li>802.1s Multiple Spanning Tree Protocol (MSTP)</li> <li>Loop Guard</li> <li>Root Guard</li> <li>TC-BPDU Guard</li> <li>BPDU Guard BPDU Filter</li> </ul>
Ring Protection	<20ms G.8032 ERPS Ring
Multicast	<ul style="list-style-type: none"> <li>256 groups</li> <li>IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping</li> <li>Multicast VLAN</li> </ul>
QOS	<ul style="list-style-type: none"> <li>port-based</li> <li>CoS 802.1p-based CoS</li> <li>DSCP-based</li> <li>Scheduling algorithms SP, WRR, SP+WRR</li> <li>Storm Control (Broadcast, Multicast, Unknown Unicast)</li> <li>Bandwidth control per port</li> </ul>



# LM-4804XFMGP-L3

DHCP	<p>SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups</p> <p>WEB (HTTP/HTTPS)</p> <p>CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration</p> <p>Backup/Reload</p> <p>Dual Firmware</p> <p>LLDP</p>
Security Features	<p>Port Security MAC address filter</p> <p>ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection</p> <p>DoS (Denial of Service)</p> <p>Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type;</p> <p>802.1x Authentication (port-based e MAC-based)</p> <p>TACACS/TACACS+ Authentication</p> <p>RADIUS Authentication</p> <p>DHCP Filter</p> <p>Guest VLAN</p> <p>SSLv2/SSLv3/TLSv1</p> <p>SSHv1/SSHv2</p> <p>Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection</p>
Other Features	<p>DNS Client DHCP</p> <p>Relay DHCP Client</p> <p>DHCP Snooping</p> <p>DHCP Option 82</p> <p>SNTP Client</p> <p>UDLD</p>
Maintenance	<p>Cable Diagnostics</p> <p>Ping</p> <p>SFP DDM(Digital Diagnostics Monitoring) Thermal protection</p> <p>System log (Local and Remote)</p> <p>Memory and CPU Monitoring</p>