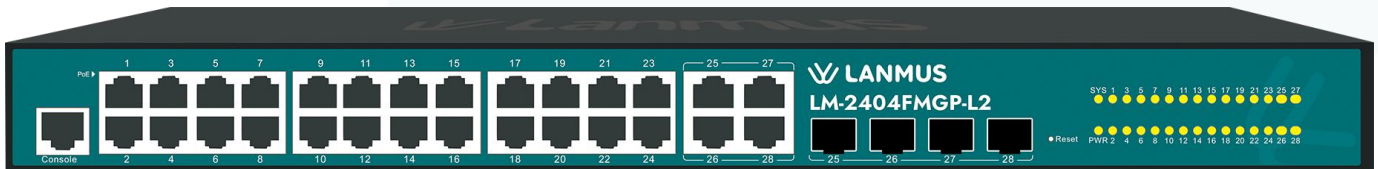


LM-2404FMGP-L2



OVERVIEW

The LM-2404FMGP-L2 is a full Gigabit L2+ managed PoE Ethernet fiber switch independently developed by LANMUS. It has 24*10/100/1000Base-T PoE ports 1-24 can support(IEEE802.3af/at, with a maximum power of 30w per port and a total power of 450w). 4*10/100/1000Base-T uplink Combo RJ45 and 4*100/1000Base-X uplink Combo SFP fiber ports. Each port can support wire-speed forwarding. The switch integrates the bypass optical switching module. When the power supply of the switch is interrupted, the optical fiber is automatically switched to the bypass-through state to avoid communication interruption due to switch failure and ensure the reliability of network transmission.

The LM-2404FMGP-L2 has L2+ network management function, support IPV4 static route forwarding, complete security protection mechanism, ACL/QoS policy and rich VLAN functions, easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP(<50ms) ,Support ERPS ring network function(convergence time<20ms) to improve link backup and network reliability to ensure uninterrupted communication of important applications. According to actual application needs, Routing address management, port management, port flow control, VLAN division, IGMP, security policy and other application service configurations are performed through Web, CLI, SNMP, Telnet and other network management methods. The shell is made of steel alloy, which has excellent field environmental adaptability (including mechanical stability, climate environment adaptability, electromagnetic environment adaptability, etc.), protection level is IP40, support dual redundant power supply, low power consumption and no fan, 3-year warranty. It is suitable for scenarios such as intelligent transportation, rail transit, electric power industry, mining, petroleum, shipping, metallurgy and green energy construction to establish a cost-effective, stable and reliable communication network.

FEATURE

Gigabit access, SFP fiber port uplink, Integrated Bypass function

- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Support Gigabit Ethernet port and Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support physical single-mode single fiber optical path(**Bypass**) function, pure hardware switching, short switching time, does not affect the data transmission rate and improves the stability of the network system.

Network management and fast ring function

- STP/RSTP/MSTP/ERPS.
- Static and dynamic aggregation.
- IEEE802. 1Q VLAN, flexible VLAN division, Access, Trunk and Hybrid.
- QoS, Priority mode based on 802. 1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- IGMP Snooping V1/V2/V3 meets multi-terminal high-definition video surveillance and video conference access requirements.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.

Security

- 802. 1X authentication.
- Port isolation, storm control.
- IP-MAC-VLAN-Port binding.

Stable and reliable

- CCC, CE, FCC, RoHS.
- Low power consumption, No fan, aluminum shell.
- The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A.

One-stop remote control and management

- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose

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- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).

| Model | LM-2404FMGP-L2 |
|----------------------------------|---|
| Interface Characteristics | |
| Fixed Port | 24* 10/ 100/ 1000Base-T PoE ports 4* 10/ 100/ 1000Base-Tuplink Combo RJ45 ports 4*100/1000Base-X uplink Combo SFP ports 1*RS232 console port |
| Ethernet Port | Port 1-24 support 10/ 100/ 1000Base-T 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 interface, default no include optical modules (Only supports single-mode single fiber optical module. LC) |
| Wavelength/ Distance | multimode: 850nm 0~550M,1310nm 0~2KM single mode: 1310nm 0~40KM , 1550nm 0~120KM |
| Chip Parameter | |
| Network Management Type | L2+ |
| Ring network | Supports ERPS ring network function, with a maximum number of rings of 5 and a convergence time of <20ms |
| Network Protocol | IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-X, IEEE802.3z 1000Base-X, IEEE802.3x |
| Forwarding Mode | Store and Forward(Full Wire Speed) |

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| Switching Capacity | 56Gbps | |
| Buffer Memory | 41.66Mpps | |
| MAC | 8K | |
| LED Indicator | PowerIndicatorLight | P : 1 Green |
| | Fiber Indicator Light | F : 1 Green (Link,SDFED) |
| | On thePoE seat | Green:Indicate PoE |
| | | Green: Indicates network working status |
| Reset | Yes, Press and hold the reset switch for 5s and release it to restore the factory settings | |
| PoE characteristics | | |
| Power supply | AC:100-240V50/60Hz) | |
| PoE power supply method | Supports 1,2+, 3,6-power supply | |
| PoE output power | Each port has a power supply of 15.4w and a maximum power of 30w per port total power of 450w | |

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Certification & Warranty

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|---------------------------|---|
| 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 Standard)</p> |
| Mechanical Properties | <p>IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)</p> |
| Certification | <p>CCC, CE mark, commercial, CE/LVD EN62368- 1, FCC Part 15 Class B, RoHS</p> |
| 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 (L*W*H) | 440mm* 300mm*44mm |
| Installation | Desktop, DIN rail |

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| L2 functions | |
|--------------------|--|
| 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, L2+ 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 |
| Ring Protection | <20ms G.8032 ERPS Ring |

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| Multicast | <p>256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN</p> |
| QOS | <p>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</p> |
| DHCP | <p>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</p> |
| Security Features | <p>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</p> |

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| Other Features | DNS Client DHCP Relay DHCP Client DHCP Snooping DHCP Option 82 SNTP Client UDLD |
| PoE management | Soft-Reboot PoE Non-stop Total PoE Per port PoE function enable/disable PoE classification detection PD alive check PoE schedule |
| Maintenance | Cable Diagnostics Ping SFP DDM(Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring |
| L2+ functions | IPV4 Equal Cost Routing NG protocol, maximum 1000 entries ARP protocol, maximum 1000 entries Pingv6, Telnetv6, TFTPv6, DNSv6, ICMPv6 IPV4/IPV6 VRRP, the maximum group is 255 IPV4/IPV6 VLANIF interface supports up to 128 IPV4/IPV6 static route/default route supports up to 128 entries L2+ network management function, IPV4/IPV6 dual-stack management Layer 3 routing and forwarding, support communication between different network segments and different VLANs |