



**LinTech**  
Linking the world

LinTech

Factory: ZI Tit Mellil, Lot 2 N°4, Tit Mellil, Casablanca

Headquarters: N°46, Avenue El Walâa & Rue Abdelkhalek

Torres -Dakhla -Oued Eddahab

+212 5 22 22 41 03

[commercial@litech.ma](mailto:commercial@litech.ma)

[www.litech.ma](http://www.litech.ma)

## PoE, L2 Managed Switch: LN-M2-48P-P2-4S+

### Product Description

The LN-M2-48P-P2-4S+ management switch is a comprehensive Gigabit network management switch, which provides a new generation of high-performance hardware and software platforms, providing flexible, cost-effective full Gigabit access and upstream ports, supporting complete security protection. Mechanism, perfect ACL / QoS strategy and flexible VLAN feature, easy to manage maintenance, meet users for network equipment easy to manage, high security, low-cost networking requirements for campus, hotel and enterprise park network access, more Application scenario.

### Product performance

Powerful business processing capabilities

- Support IGMP Snooping to meet multi-terminal HD video surveillance and video conferencing access needs
- Support static routing, administrators manually configure routing entries, implement communication between different network segments, simple, efficient, and reliable
- Support the ARP agent, 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
- QoS support, port support, 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 permissionsFilter, 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. Package
- 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

PoE power supply capability

- PoE models support the IEEE 802.3af/at PoE power supply standard to meet the PoE power supply needs of security monitoring, teleconference systems, wireless coverage and other scenarios
- Support PoE management, support PoE port settings, support PoE watchdog

- Automatic detection and identification of standard PoE power receiving equipment, intelligent power supply, will not burn non-standard PoE power receiving equipment or ordinary equipment
- PoE models have a maximum PoE output power of 30W per port
- The PoE port supports a priority mechanism, when the remaining power is insufficient, the power supply of the high-priority port is guaranteed first

#### Various 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 fastSpeed 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
- 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
- HTTP support, TFTP software upgrade, configuration management

### Hardware specifications

Model	LN-M2-48P-P2-4S+
Downlink ports	48*10/100/1000M Adaptive RJ45 ports
Uplink ports	4*1000M SFP fiber

PoE standard power supply	IEEE 802.3at、 IEEE 802.3af
Maximum output power	450W
LED indicator	PWR, Link / Act
transmission mode	IEEE802.3 full duplex flow control and backpressure half duplex flow control
Bandwidth	104Gbps
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

Router	Support static route ARP proxy support
Loop protection	ERPS ring protection support Support 50MS loop since healing Support BPDU protection, root protection and loopback protection
Summing tree (STP)	STP support (IEEE 802.1D), RSTP support (IEEE 802.1W) MSTP (IEEE 802.1s) support

	Support loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering
PoE management	Support PoE port management PoE watchdog support Support PoE power display
DHCP	DHCP server support DHCP relay support DHCP Snooping Support Support Option, Option82
VLAN	4K VLAN Support 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	Follow IEEE 802.1D standard Support MAC address automatic learning and aging Support static, dynamic, filter address table
Security feature	Based on user grading management and password protection Support for port numbers, IP addresses, MAC addresses limit users access Support HTTPS, SSL V3, TLS V1, SSH V1/V2 Support IP-MAC-Port-VLAN quarter binding Support ARP protection, IP source protection, DOS protection Support DHCP Snooping, DHCP Attack Protection Support 802.1x certification, AAA RADIUS Support TACACS + Support Support port security, port isolation CPU protection support
Access Control (ACL)	Supports L2 (Layer 2) ~ L4 (Layer 4) package filter function 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 Support port mirror, port redirection, flow rate, QoS heavy mark

	IPv4, IPv6ACL support
Quality of Service (QoS)	Support 8 port queues Support port priority, 802.1p priority, DSCP priority WRR support, strict priority scheduling algorithm
Multicast	Support IGMP V1/V2/V3 Snooping MLD V1 / V2 Snooping Support Support fast leaving mechanism VLAN multicast support Support multicast filtering, packet statistics, unknown multicast disk card
Management and maintenance	Web network management support (HTTP, HTTPS, SSL V3, TLS V1) CLI support (Telnet, SSH V1 / V2, local serial port) SNMP V1/V2/V3 support, public MIBS compatible LLDP, RMON support Support CPU monitoring, memory monitoring Support system log, grading warning Support ping, traceroute detection, UDLD Support electrical port test, optical module information detection HTTP support, TFTP software upgrade, configuration management

## Ordering Information

### Product Description

LN-M2-48P-P2-4S+	48*10/100/1000M RJ45 ports+4*1000M SFP fiber
------------------	--

#### 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

**« 1 year warranty »**