

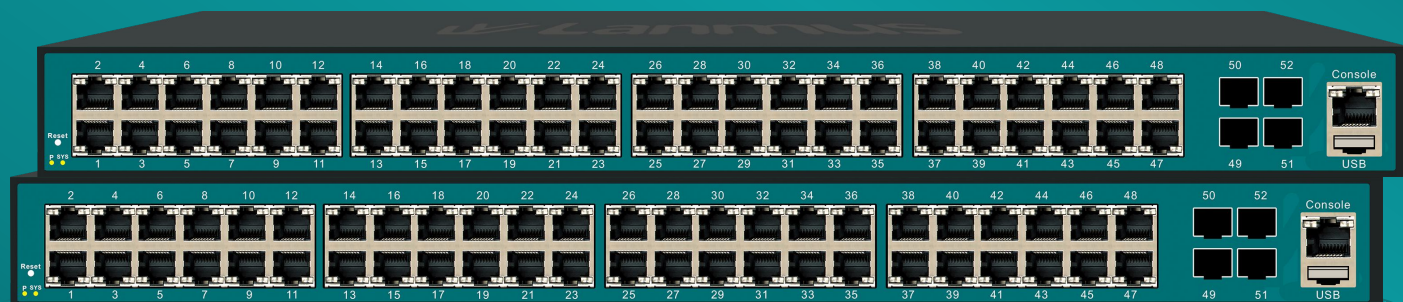


LM-HY4T048G-SFP

DATASHEET

52-port 10G Uplink L3 Managed Industrial Ethernet Switch

The LM-HY4T048G-SFP is an industrial L3 managed switch with 48 Gigabit ports and 4 × 10G uplinks, offering advanced routing, security, and fast ring redundancy. Built with IP40 protection and dual power support, it ensures reliable performance in demanding industrial environments.



Product Introduction

52-port 10G Uplink

L3 Managed Industrial Ethernet Switch

Product Overview

The LM-HY4T048G-SFP is a 10G uplink L3 managed industrial Ethernet fiber switch. It has 48 × 10/100/1000Base-T RJ45 ports and 4 × 1/10G SFP+ fiber slot ports. Each port supports wire-speed forwarding.

The LM-HY4T048G-SFP has L3 network management functions, supports IPv4/IPv6 management, dynamic routing with full line-speed forwarding, a complete security protection mechanism, perfect ACL/QoS policy, and rich VLAN functions, making it easy to manage and maintain.

With industry-leading ring network technology, it supports a variety of industrial-grade redundant ring network protocols. Each port can form a ring network, supporting chain ring network, star network, double star network, ring network, tangent ring network, intersecting ring network, and coupled ring network, with self-healing within ERPS <20ms.

The switch series features high reliability, high security, and high manageability, ensuring reliable transmission of key data and supporting remote management. The product fully follows industrial-grade design and materials. The shell is made of aluminum alloy to enhance heat dissipation and offers excellent adaptability to industrial site environments (including mechanical stability, climate adaptability, and electromagnetic compatibility).

The protection level reaches IP40 and supports AC+DC dual redundant power supply, with a 3-year warranty. It is suitable for intelligent transportation, rail transit, power industry, mining, petroleum, and industrial scenarios such as shipping, metallurgy, and green energy construction, forming a cost-effective, stable, and reliable communication network.

Highlight Features

Gigabit access, 1G fiber uplink

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

Product Introduction

Highlight Features

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

- 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,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-HY4T048G-SFP
INTERFACE CHARACTERISTICS	
Fixed Port	48 * 10/100/1000Base-T RJ45 ports 4 * 1/10G uplink SFP+ 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)
Optical Fiber 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
Optical Cable/ Distance	Multi-mode:850nm /0~300M(10G) ,850nm /0~500M (1.25G); Single-mode:1310nm/ 0~40KM,1550nm/ 0~120KM.

SPECIFICATION

MODEL	LM-HY4T048G-SFP
CHIP PARAMETER	
Network Management Type	L3
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	130Mpps
Flash	16 MB
RAM	512 MB
MAC	16K
LED Indicator	• Power Indicator Light • Power Indicator Light • On the RJ45 seat • P : 1 Green • F : 1 Green • Yellow: Indicate PoE • Green: Indicates network working status
Reset Switch	Yes, Press and hold the reset switch for 5s and release it to restore the factory settings
POWER	
Dual power supply	AC: 100-240V 50/60Hz; DC: 36-72V

SPECIFICATION

MODEL	LM-HY4T048G-SFP
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, Part 15 Class B, RoHS
PHYSICAL PARAMETER	
Operation TEMP / Humidity	-40~+80°C, 5%~90% RH Non condensing
Storage TEMP /Humidity	-40~+85°C, 5%~95% RH Non condensing
Dimension (L * W * H)	440mm * 314mm * 44mm
Installation	Desktop, 19 inch 1U cabinet installation

SPECIFICATION

MODEL	LM-HY4T048G-SFP
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-HY4T048G-SFP
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-HY4T048G-SFP
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



Xtreme Switch

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