



MARS4028G

28 port Full Gigabit Layer2 Managed Ethernet Switch



Introduction

MARS4028G is a high-performance, high cost-effective managed industrial Ethernet switch, supporting 24 10/100/1000Base-TX electrical ports and 4 1000Base-FX optical ports (SFP slot) or 16 10/100/1000Base-TX electrical ports, 8 combo electrical & optical ports, and 4 1000Base-FX optical ports (SFP slot). All electrical ports of the switch support auto flow control, full/half duplex and MDI/MDI-X self-adaptive. In addition, it also provides advanced management functions such as: VLAN, link trunking, Quality of Service, spanning tree, rate control, loop back, port mirroring, port isolation, ring network redundancy, fault alarm, and firmware online update. The unique redundant Ethernet patented technology brings you intelligent redundancy for Ethernet, and offers a visual WEB operating interface. This switch adopts standard industrial design, no fan, and low power consumption; all components are of industrial grade, realizing a high reliability and satisfying requirements of all industrial applications.

1. Support IEEE802.3, 802.3u/802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W
2. Support 24 10/100/1000Base-TX Ethernet electrical ports and 4 1000Base-FX optical ports or 16 10/100/1000Base-TX Ethernet electrical ports, 8 Combo optical & electrical ports, 4 1000Base-FX optical ports
3. 8K MAC table size
4. Backplane bandwidth 56Gbps
5. Back pressure and flow control prevent data package loss under high network load
6. SM-Ring patented technology, support Single, Couple, Star, Double-star, failover time < 20ms
7. Support MAC auto learning, auto aging
8. Support WEB page configuration, import and export of configuration file
9. Support port status display, port data update
10. Support link trunking
11. Support port isolation
12. Support port-based VLAN, MAC-based VLAN, protocol-based VLAN
13. Support GMRP, IGMP Snooping, and static multicast
14. Support STP, RSTP, MSTP
15. Support network security management, access control



16. Support 802.1x certification
17. Support remote network monitoring
18. Support multi-port mirroring, single port mirroring, and network diagnosis
19. Support rate control, broadcast, unknown multicast, unknown unicast storm control
20. Support LLDP, QoS, DHCP Server, DHCP-monitor, ACL, loop back
21. Support password management and static address lock
22. Support 1 power input, and 1 relay alarm output
23. Industrial design, -40-75°C working temperature
24. Solid aluminum plate shell
25. Fanless design
26. IP40 protection grade, 19" standard rack-mounted

Specification

Technology

Standard: IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3z, IEEE802.1Q, IEEE802.1p, IEEE802.1W

Protocol: ARP, ICMP, TCP, DHCP, DNS, HTTP, Telnet, RSTP, MSTP, LLDP, LACP, IGMP, GMRP, SNMP

Flow Control: IEEE802.3x flow control, Back Pressure

Function

Switch Functions: SM-Ring, QOS, VLAN, MSTP, SNMP, ACL, LLDP, RMON, DHCP, GMRP, IGMP

Snooping, link trunking, static multicast, port mirroring, port isolation, bandwidth management, storm control, port traffic statistics, online update, up and download configuration file, user name access system

SM-Ring: Single, Couple, Chain, Dual homing

Interface

Electrical port: 10/100/1000Base-TX self-adaptive RJ45 port, full / half duplex or forced working mode, support MDI/MDI-X self-adaptive

Optical port: 1000Base-FX

Alarm port: 2 bits 7.62mm terminal block

1 relay alarm message output

Console port: CONSOLE management port

Transmission distance

Twisted pair: 100M (standard CAT5/CAT5e cable)

Optical: Multi-mode 850nm/2Km

Multi-mode 1310nm/2Km/5Km

Single-mode 1310nm/20/40/60Km

Single-mode 1550nm/80/100/120Km

Switch Properties

1000M forward speed: 1488100pps

<http://www.lptechnical.com>



Transmit mode: store and forward

Switched bandwidth: 56G

Buffer: 1.5M

MAC table size: 8K

Indicator

Power indicator: PWR

Alarm indicator: ALARM

Run status indicator: RUN

Port connection / run status indicator: (1-28)

Power Supply

Input voltage: 220VAC (100~240VAC)

Terminal block: 3 bits terminal block

No-load power: 13.3W@220VAC

Full-load power: 21.2W@220VAC

Physical Characteristics

Shell: IP40 protection grade, metal shell

Installation: 19" rack-mounted

Weight: 2950g

Size (H*W*D): 441.6mm×208.9mm×44.6mm

Working Environment

Working temperature: -40℃ ~ 75℃

Storage temperature: -40℃ ~ 85℃

Humidity: 0%~95% (no condensation)

Industry Standard

EMI: FCC Part 15, CISPR (EN55022) class A

EMS: EN61000-4-2 (ESD), Level 4

EN61000-4-4 (EFT), Level 3

EN61000-4-5 (Surge), Level 4

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Warranty

Warranty period: 5 years

Certification

CE, FCC, RoHS, UL508 (pending)

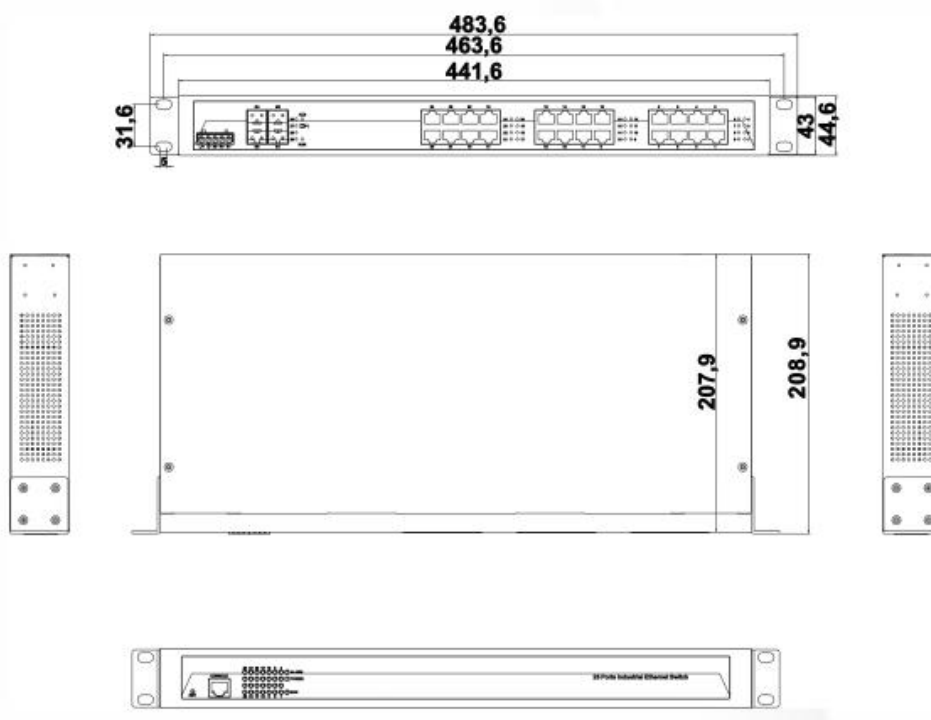
Packing List

1. Ethernet switch MARS4028G(plus terminal block) × 1



- 2. User manual x 1
- 3. CD x 1
- 4. Certificate of quality x 1
- 5. Warranty card x 1
- 6. Power cable x 1

Dimension



Order Information

MARS4028G-

Ports PS

Ports

16GT/8GC/4GS	=	16 x 10/100/1000BASE-TX RJ45 Port, 8 x Gigabit Combo Port, 4 x Gigabit SFP Slot
24GT/4GS	=	24 x 10/100/1000BASE-TX RJ45 Port, 4 x Gigabit SFP Slot

PS: Power Supply

HV	=	100VAC~240VAC, single power input
HV-HV	=	100VAC~240VAC, dual redundant power input



Example Order Codes

MARS5028G-24GT/4GS-HV-HV

24 x 10/100/1000BASE-TX RJ45 Port, 4 x Gigabit SFP Slot, 100VAC~240VAC,Duel redundant power input