



## MARS4024

24 x 100M Layer2 Managed Ethernet Switch



### Introduction

MARS4024 is an industrial grade, managed and redundancy Ethernet switch which 24 x 100M ports(10/100BASE-TX RJ45 Port, and 100BASE-FX fiber Port). It provided some kinds of advanced network managed function, like as: SM-Ring redundancy ring network, VLAN, Trunking, Quality of Service, Speed control, port mirroring, fault alarm and firmware upgrade online. SM-Ring can bring your Ethernet to intelligent redundancy. Standard Industry design, can satisfied every requirement of the industry scene. All components used industry grade, it takes products high reliability. It provided wide voltage power supply input.

Product complies with FCC and CE standards, in line with the industrial design requirements, for intelligent substation construction provides high-performance, high-quality products guaranteed. Support 1 channel power inputs and 1 relay alarm output, wide temperature range of -40~75°C to be able to meet the requirements of all kinds of industrial field, can be widely used in electric power, water conservancy, transportation, and other fields.

- 1.Support IEEE802.3, IEEE802.3u, IEEE 802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W
- 2.SM-Ring ring network patent technology (Fault recovery time<20ms)
- 3.Support RSTP, way exchange time<50ms
- 4.Support static multicast, IGMP Snooping and GMRP
- 5.Support Port based VLAN and IEEE 802.1Q VLAN
- 6.Support QOS absolutely and opposite priority
- 7.Support rate control, Broadcast storm control
- 8.Support WEB, SNMP and Telnet configuration
- 9.Support MAC address learning, aging automatic
- 10.Support DHCP server and port frame statistics
- 11.Support email warning and relay warning
- 12.Support port status display, data update.
- 13.Support configuration file up and download
- 14.Support 1 channel relay alarm output
- 15.Industrial grade 4 design, -40~75°C working temperature
- 16.IP30 protection grade, 19-inch rack mounting
- 17.No fan design



## Specification

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### Technology

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

Protocol: ARP, ICMP, TCP, DHCP, DNS, HTTP, Telnet, SM-Ring, RSTP, SNMP

Flow control: IEEE802.3x flow control, Back-pressure based flow control

### Function

Switch function: SM-Ring, QOS, 802.1QVLAN, RSTP, SNMP, Port trunking, static multicast filter, port mirroring, bandwidth management, broadcast storm control, port flow statistics, upgrade online, up and download configuration file, user name access system

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

### Exchange attribute

100M forward speed: 148810pps

100M maximum filter speed: 148810pps

Transmit mode: store and forward

System exchange bandwidth: 12.8G

MAC address table: 8K

Memory: 4M

### Interface

100M fiber port: 100Base-FX, SC/ST/FC connector, support single mode (20/40/60/80Km optional), multi mode (2Km), wavelength: 1310nm, 1550nm

Console port: debug serial port carry out CLI command

Alarm port: 2 bit terminal block

1 channel relay alarm output

### Transfer distance

Multi-mode: 1310nm, 2/5Km

Single-mode: 1310nm, 20/40/60Km  
1550nm, 80/100/120Km

### LED indicator

Run indicator: Run

Interface indicator: Link (1~24)

Power supply indicator: PWR

Alarm indicator: Alarm

### Power supply

Input Voltage: 100~240VAC

Type of input: 3 bits terminal block

Overload current protect: 1.2A

### Consumption

No-load consumption: 22.0W

Full-load consumption: 23.0W

### Working environment

Working temperature: -40~75℃



Storage temperature: -40~85℃

Relative Humidity: 5%~95 %( no condensation)

**Mechanical Structure**

Shell: IP30 protection grade, metal shell

Installation: 19" 1U rack

Size (W×H×D): 441.6mm×45mm×208.9mm

**Industry Standard**

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

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

EN61000-4-3 (RS), Level 3

EN61000-4-4 (EFT), Level 4

EN61000-4-5 (Surge), Level 4

EN61000-4-6 (CS), Level 3

EN61000-4-8, Level 5

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

**Certification**

CE, FCC, RoHS, UL508 (Pending)

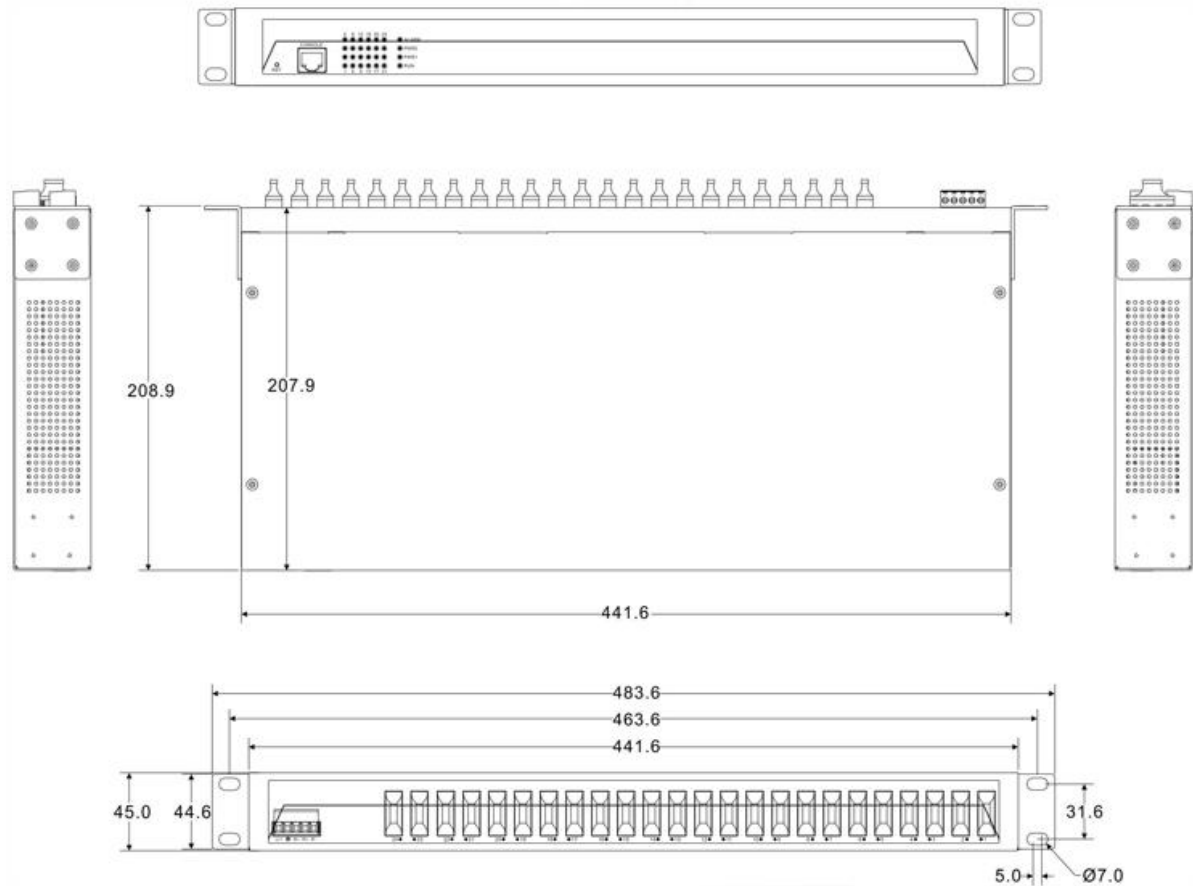
Warranty: 5 years

**Packing list**

1. Industrial Ethernet Switch MARS4024(plus terminal block) × 1
2. User manual × 1
3. Attached CD × 1
4. Certificate of quality × 1
5. Warranty card × 1
6. Power cable × 1



## Dimension



## Order Information

MARS4024-

Ports	Distance	Connector	FM	PS
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### Ports

24TX	=	24 x 10/100BASE-TX RJ45 Port
22TX/2FX	=	22 x 10/100BASE-TX RJ45 Port, 2 x 100BASE-FX fiber Port
20TX/4FX	=	20 x 10/100BASE-TX RJ45 Port, 4 x 100BASE-FX fiber Port
16TX/8FX	=	16 x 10/100BASE-TX RJ45 Port, 8 x 100BASE-FX fiber Port
12TX/12FX	=	12 x 10/100BASE-TX RJ45 Port, 12 x 100BASE-FX fiber Port
8TX/16FX	=	8 x 10/100BASE-TX RJ45 Port, 16 x 100BASE-FX fiber Port
4TX/20FX	=	4 x 10/100BASE-TX RJ45 Port, 20 x 100BASE-FX fiber Port
24FX	=	24 x 100BASE-FX fiber Port

### Distance: Fiber Distance

1302	=	1310nm,2km,(multimode fiber)
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1320	=	1310nm,20km
1340	=	1310nm,40km
1580	=	1550nm,80km

### Connector: Fiber Connector

SC	=	SC Connector
ST	=	ST Connector
FC	=	FC Connector

### FM: Fiber Mode

SM	=	Single mode fiber
MM	=	Multi mode fiber

### PS: Power Supply

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

### Example Order Codes

MARS4024-20TX/4FX-1320-SC-SM-HV-HV

20 x 10/100BASE-TX RJ45 Port, 4x 100BASE-FX SM SC Port,1310nm,20km,100VAC~240VAC,Dual redundant power input