



MARS3010

7/8 x 100M + 3/2G Layer2 Managed Ethernet Switch



Introduction

MARS3010 Gigabit managed redundant industrial Ethernet switch is equipped with up to 3 Gigabit Ethernet ports(3-port SFP or 3-port GbE), making it ideal for building a Gigabit SM-Ring, but leaving a spare Gigabit port for uplink use. The Ethernet redundant SM-Ring (recovery time < 20 ms) can increase system reliability switches and the availability of your network backbone. MARS3010 is designed with industrial standard, can be suited to the applications in different industrial environments. MARS3010 supports numerous intelligent network management functions, including such as QoS, VLAN, Port Trunking, velocity configuration and alarm enabling functions.

1. Support 7-port 100M and 3-port 1000Base-FX or 8-port 100M and 2-port 1000Base-FX
2. SM-Ring(recovery time < 20 ms at full load)
3. Port-based VLAN, IEEE 802.1Q VLAN to ease network planning
4. Port Trunking for optimum bandwidth utilization
5. Lock port function for blocking unauthorized access based on MAC address
6. Store and forward.8k address. Support MAC address filtrate struction
7. Port mirroring for online debugging
8. Bandwidth management prevents unpredictable network status
9. Dual power backup, Relay output warning for power failure and port break alarm
10. Port link, ring fault/abnormity alarm indication
11. IP40 protection, rugged high-strength metal case
12. Redundant 24VDC power input (12V~48VDC) Operating
13. DIN-Rail or wall mounting optional

Specification

Technology

Standard: IEEE802.3, IEEE802.3u, IEEE 802.3x, 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

1000M forward filter speed: 1488100pps

Transmit mode: store and forward

System exchange bandwidth: 7.4G

MAC address table: 8K

Memory: 1M

Interface

Electric port: RJ45 connector, 10Base-T/100Base-TX auto speed control, Half/full duplex and MDI/MDI-X auto detect;

1000M fiber port: 1000Base-FX (SFP port , LC connector)

Console port: debug serial port carry out CLI command

Alarm port: 2 bit 7.62mm terminal block

1 channel relay alarm output

Load ability: 1A@24VDC

Transfer distance

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

LED indicator

Run indicator: Run

Interface indicator: Link (1~7/G1~G3)

Power supply indicator: PWR1, PWR2

Alarm indicator: Alarm

Power supply

Input Voltage: 12~48VDC

Type of input: 4 bits terminal block

Overload current protect: 4.0A(DC) or 5.0A(AC)

Support dual power supply redundancy

Support reverse polarity protection

Working environment

Working temperature: -40~75℃

Storage temperature: -40~85℃

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

Mechanical Structure

Shell: IP40 protection grade, metal shell

Installation: DIN-Rail or wall mounting optional

Size (W×H×D): 138mm×53mm×110mm

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

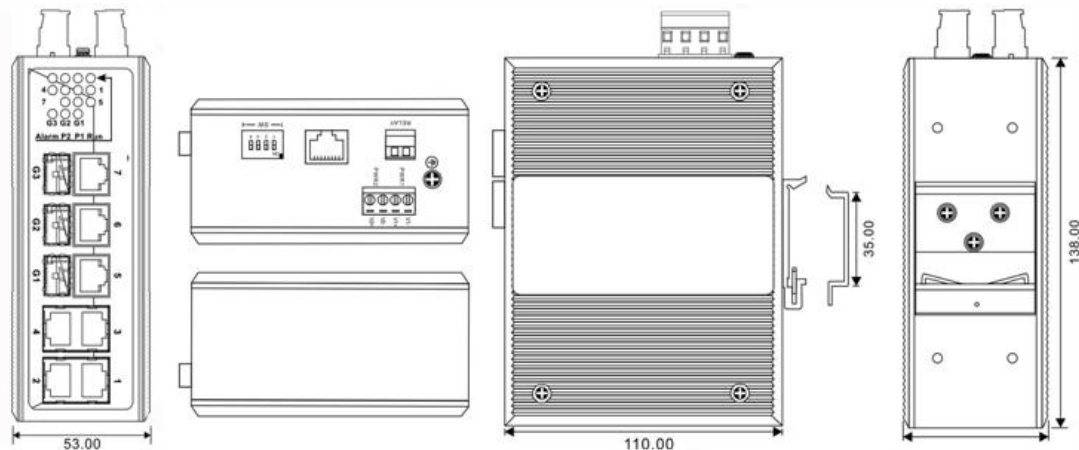
CE, FCC, RoHS, UL508 (Pending)

Warranty: 5 years

Packing list

1. Industrial Ethernet Switch MARS3010(plus terminal block) × 1
2. User manual × 1
3. Attached CD × 1
4. Certificate of quality × 1
5. Warranty card × 1
6. DB9 to RJ45 console port cable × 1
7. DIN-Rail setting fittings(wall mounting optional)

Dimension



Order Information

MARS3010-

Ports

Distance

Connector

FM

PS

Ports

4TX/2GS = 4 x 10/100BASE-TX RJ45 Port, 2 x Gigabit SFP Slot

8TX/2GS = 8 x 10/100BASE-TX RJ45 Port, 2 x Gigabit SFP Slot



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7TX/3GS	=	7 x 10/100BASE-TX RJ45 Port, 3 x Gigabit SFP Slot
6TX/2FX/2G S	=	6 x 10/100BASE-TX RJ45 Port, 2 x 100BASE-FX fiber Port, 2 x Gigabit SFP Slot
4TX/4FX/2G S	=	4 x 10/100BASE-TX RJ45 Port, 4 x 100BASE-FX fiber Port, 2 x Gigabit SFP Slot

Distance: Fiber Distance

1302	=	1310nm, 2km (multimode fiber)
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

L2	=	12~48VDC, dual redundant power input
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Example Order Codes

MARS3010-7TX/3GS-L2

7 x 10/100BASE-TX RJ45 Port, 3 x Gigabit SFP Slot, 12~48VDC, Dual redundant power input