



## MARS1016

16 x 100M Unmanaged Ethernet Switch



### Introduction

MARS1016 is unmanaged Industrial Ethernet switch with high performance, high cost-effective, it provided 16 port 10Base-T/100Base-TX Ethernet or port 100Base-FX (FC/SC/ST). Product accorded to CE, FCC standard and Industry grade 4 design requirement, support 2 redundant power input and 1 channel relay alarm output, and -40~75°C working temperature, can meet all kinds of Industrial environment requirement. It can use in power, water conservancy, transportation area etc.

- 1.Support IEEE802.3, IEEE802.3u, IEEE 802.3x
- 2.Store and Forward switching process type
- 3.Support MAC address auto-learning, auto-aging
- 4.Support 8K MAC address
- 5.Support 12.8Gbps backboard bandwidth
- 6.Support redundancy power supply(12~48VDC)
- 7.Support 1 channel relay alarm output
- 8.Operating temperature range from -40 to 75°C
- 9.Designed without fan
- 10.DIN rail mounted
- 11.Metal shell, IP40 protection grade

### Specification

#### Technology

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

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

#### 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

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

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: Reserve

Alarm port: 2 bit terminal block

1 channel relay alarm output

### Transfer distance

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

Multi-mode: 1310nm, 2/5Km

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

### LED indicator

Run indicator: Run

Interface indicator: Link (1~16)

Power supply indicator: P1, P2

Alarm indicator: Alarm

### Power supply

Input Voltage: 24VDC (12~48VDC)

Type of input: 4 bits 7.62mm terminal block

Support DC dual power supply redundancy

Overload current protect: 1.2A

### Consumption

No-load consumption: 6.12W@24VDC

Full-load consumption: 8.33W@24VDC

### 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 mounted

Size (W×H×D): 70mm×160mm×130mm

### 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

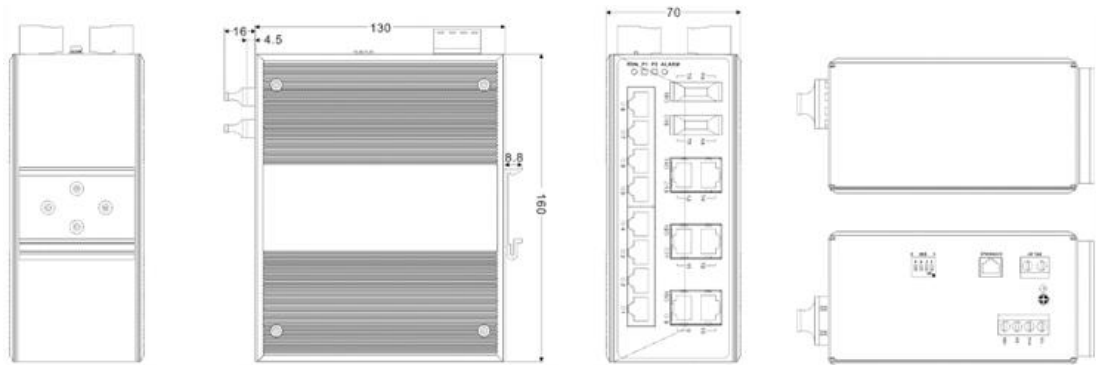
CE, FCC, RoHS, UL508 (Pending)

Warranty: 5 years

### Packing list

1. Industrial Ethernet Switch MARS1016 (plus terminal block) × 1
2. User manual × 1
3. Certificate of quality × 1
4. Warranty card × 1

### Dimension



### Order Information

MARS1016-	-	-	-	-	-
	Ports	Distance	Connector	FM	PS

Ports		
16TX	=	16 x 10/100BASE-TX RJ45 Port
14TX/2FX	=	14 x 10/100BASE-TX RJ45 Port, 2 x 100BASE-FX fiber Port
12TX/4FX	=	12 x 10/100BASE-TX RJ45 Port, 4 x 100BASE-FX fiber Port
10TX/6FX	=	10 x 10/100BASE-TX RJ45 Port, 6 x 100BASE-FX fiber Port
8TX/8FX	=	8 x 10/100BASE-TX RJ45 Port, 8 x 100BASE-FX fiber Port
Distance: Fiber Distance		
1302	=	1310nm, 2km (multimode fiber)
1320	=	1310nm, 20km
1340	=	1310nm, 40km



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1580	=	1550nm,80km
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Connector: Fiber Connetor

SC	=	SC Connector
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ST	=	ST Connector
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FC	=	FC Connector
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FM: Fiber Mode

SM	=	Single mode fiber
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MM	=	Multi mode fiber
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PS: Power Supply

L2	=	24VDC (12~48VDC), duel redundant power input
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Example Order Codes

MARS1016-14TX/2FX-1320-SC-SM-L2

14 x 10/100BASE-TX RJ45 Port, 2 x 100BASE-FX fiber Port,1310nm 20km, single mode,SC,24VDC (12~48VDC),duel redundant power input