MARS1020

16 x 100M + 4G Unmanaged Ethernet Switch

Introduction

MARS1020 is a unmanaged Industrial Ethernet switch with high performance, high cost-effective , it provided 16 port 100M(10Base-T/100Base-TX Ethernet port or 100BASE-FX fiber Port) + 4 port 1000Base-FX SFP slot. It supports auto flow control, full/half duplex mode and MDI/MDI-X self-adaption. It built in standard industry design, all components are based on Industry grade, no fan, low consumption, can satisfied some kinds of requirements of industry field, to achieve high reliability.

1.Support 16 port 100M(10Base-T/100Base-TX Ethernet port or 100BASE-FX fiber Port) + 4 port 1000Base-FX SFP
2.Support MAC address auto-learning, auto-aging.
3.Support 8K MAC address table
4.System exchange bandwidth: 11.2Gbps
5.Support redundancy power supply(12～48VDC), non-polarity
6.Support flow control
7.Support Broadcast storm suppression
8.Support 1ch relay alarm output
9.Working temperature: -40℃～75℃
10.DIN rail mounted
11.No fan, low consumption.
12.Metal shell, IP40 protection grade

Specification

Technology

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

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

Exchange attribute

100M forward speed: 148810pps

1000M forward filter speed: 1488100pps

Transmit mode: store and forward

System exchange bandwidth: 11.2G

MAC address table: 8K

Memory: 256K

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

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

Console port: Reserve

Alarm port: 2 bit 7.62mm terminal block,1 channel relay alarm output

Transfer distance

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

LED indicator

Run indicator: Run

Interface indicator: Link (1~16/G1~G4)

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 dual power supply redundancy

Overload current protect: 4.0A(DC)

Power supply support non-polarity

Consumption

No-load consumption: 4.752W@24VDC

Full-load consumption: 9.854W@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): 160mm×130mm×70mm

Weight: 1016g

Industry Standard

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

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

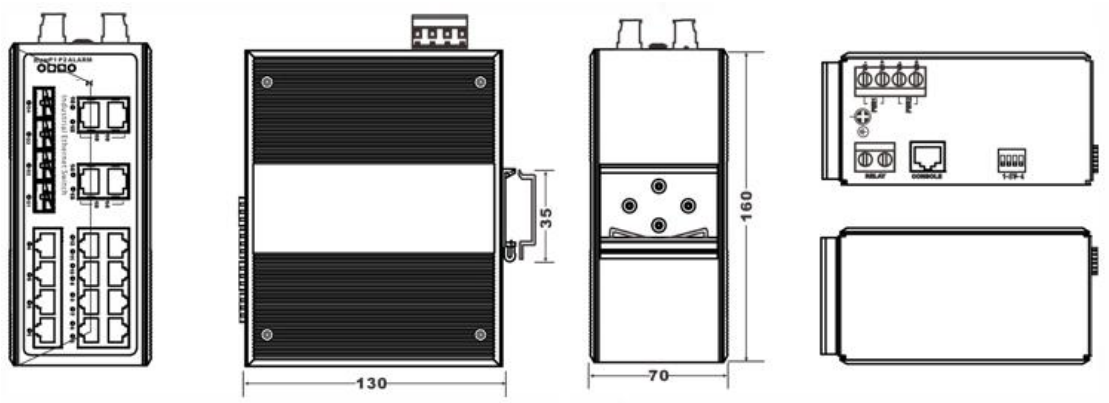
CE, FCC, RoHS, UL508 (Pending)

Warranty: 5 years

Packing list

1. Industrial Ethernet Switch MARS1020 (plus terminal block) × 1
2. User manual × 1
3. Certificate of quality × 1
4. Warranty card × 1

Dimension



Order Information

MARS1020- _____- _____ - _____ - _____ - _____

	Ports	Distance	Connector	FM	PS

Ports		
16TX/4GS	=	16 x 10/100BASE-TX RJ45 Port, 4 x Gigabit SFP Slot
14TX/2FX/4GS	=	14 x 10/100BASE-TX RJ45 Port, 2 x 100BASE-FX fiber Port, 4 x Gigabit SFP Slot
12TX/4FX/4GS	=	12 x 10/100BASE-TX RJ45 Port, 4 x 100BASE-FX fiber Port,4 x Gigabit SFP Slot

Distance: Fiber Distance		
1302	=	1310nm,2km（multimode fiber)
1320	=	1310nm,20km

1340	=	1310nm,40km
1580	=	1550nm,80km

Connector: Fiber Connetor

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, duel redundant power input

Example Order Codes

MARS1020-14TX/2FX/4GS-1320-SC-SM-L2

14 x 10/100BASE-TX RJ45 Port, 4 x Gigabit SFP Slot, 2 x 100BASE-FX fiber Port,1310nm 20km, single mode,SC,12～48VDC,duel redundant power input