



## MARS1003

3 x 100M Industrial Media Converter



### Introduction

MARS1003 is a speediness 10/100Base-TX Industrial Ethernet Media Converter, easy to connect server, repeater, switch, device to device, Can satisfy customers require for long distance, high speed, wide broadcast. Beside this, IMC102B supports electric working mode/rate setting. MARS1003 series support 2 TP ports and 1 fiber ports. TP(RJ45) support 10/100Base-T(X), Full/Half duplex mode, and auto MDI/MDI-X connection; 100BaseFX supports single-/multi-mode, SC/ST connector, optional.

MARS1003 adopts industry standard design, IP30 protection, rugged high-strength metal case, power supply input(12V~48VDC), -40 to 75°C working temperature.

1. IEEE802.3/802.3u/802.3x,store and forward
2. Plug-and-play, easy to installation
3. 10/100M, F/H duplex, MDI/MDI-X auto negotiation
4. -40 to 75°C operating temperature range
5. Designed for industrial applications. IP30 protection, rugged high-strength metal case

### Specification

#### Technology

Standards: IEEE802.1 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3 100Base-FX

RJ45 port rate: 10/100BaseT(X) auto connection, F/H duplex or force work mode and MDI/MDI-X connection

Fiber Ports: 100BaseFX ports (SC/ST optional)

Single-mode: 20, 40,60, 80, 120Km,optional

Multi-mode: 2Km

Wavelength: 850nm, 1310nm, 1550nm

Typical 100Base-FX:

Multi-mode: 155Mbps, 1310nm, 2Km,

average output $\geq$ -18dBm, sensitivity $\leq$ -35dBm

Single-mode: 155Mbps, 1310nm, 20Km,



average output  $\geq -12\text{dBm}$ , sensitivity  $\leq -36\text{dBm}$

### **Power**

Input Voltage: 24VDC (12VDC~48VDC)

Opposite connection protection

Connector: 3 bit 7.62mm terminal block

No load consumption: 1.2W@24VDC

Full load consumption: 1.536W@24VDC

### **Indicator**

Port indicator: 1~3 (LINK/ACT)

Power indicator: PWR

### **Mechanical**

Dimensions: 110mm×35mm×95mm (H×W×D)

Casing: IP30 protection, Metal case

Weight: 346g

### **Environmental**

Operating Temperature: -40 to 75°C

Storage Temperature: -45 to 85 °C

Ambient Relative Humidity: 10% to 95% (non-condensing)

### **Approvals**

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

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

EN61000-4-3(RS), level 4

EN61000-4-4(EFT), level 4

EN61000-4-5 (Surge), level 4

EN61000-4-6 (CS), level 4

EN61000-4-8, level 4

EN61000-4-11, level 4

Shock: IEC 60068-2-27 PASS

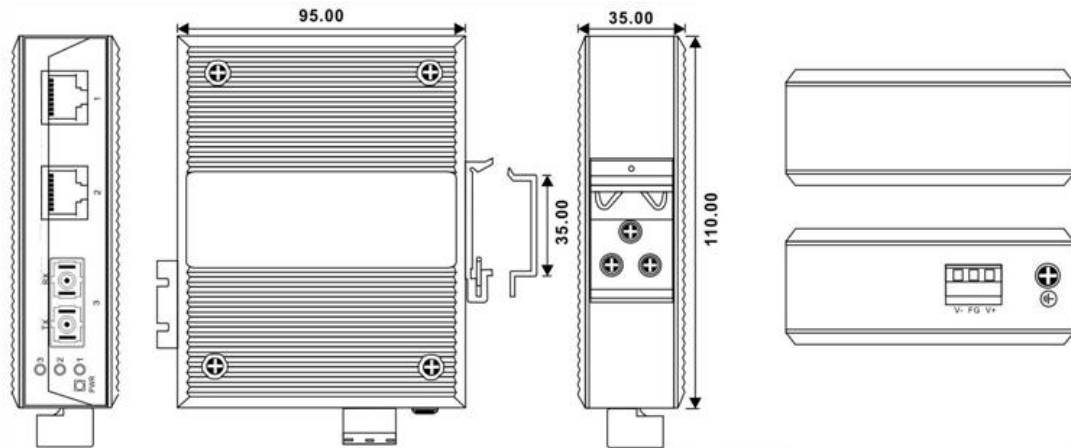
Free Fall: IEC 60068-2-32 PASS

Vibration: IEC 60068-2-6 PASS

**Warranty: 5 years**



## Dimension



## Order Information

MARS1003-

Ports

Distance

Connector

FM

PS

### Ports

2TX/1FX = 2 x 10/100BASE-TX RJ45 Port, 1 x 100BASE-FX fiber Port

### 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



Example Order Codes

MARS1003-2TX/1FX-1320-SC-SM-L2

2 x 10/100BASE-TX RJ45 Port, 1 x 100BASE-FX fiber Port, 1310nm 20km, single mode, SC, 12~  
48VDC, dual redundant power input