



## MARS1002

2 x 100M Industrial Media Converter



### Introduction

MARS1002 is a fast 10/100Base-TX Industrial Ethernet Media Converter, easy to connect server, repeater, switch, device to device, it can satisfy customers require for long distance, high speed, wide broadcast. Beside this, MARS1002 supports electric working mode/rate setting. MARS1002 series support 1 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.

MARS1002 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. Provide 1 port 10/100Based-TX and 1 port 100M optic fiber
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, DIN rail mount
6. Plug-and-play, easy to installation

### 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 $\geq$ -12dBm, sensitivity $\leq$ -36dBm

### **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: 1.368W@24VDC

### **Indicator**

Port indicator: TLINK, FLINK  
Power indicator: PWR

### **Mechanical**

Dimensions: 110mm×35mm×95mm (H×W×D)  
Casing: IP30 protection, Metal case  
Weight: 340g

### **Environmental**

Operating Temperature: -40 to 75°C  
Storage Temperature: -45 to 85 °C  
Ambient Relative Humidity: 10% to 95% (non-condensing)

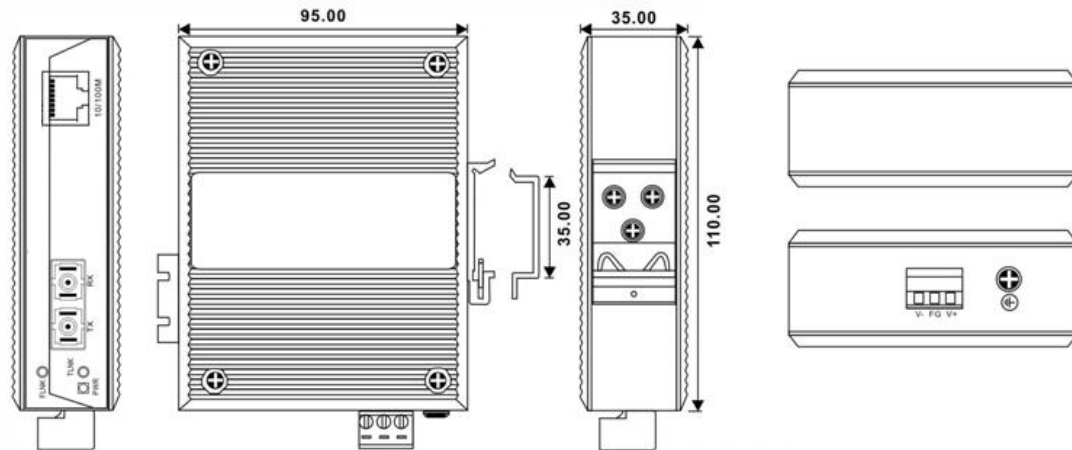
### **Approvals**

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

MARS1002-

Ports

Distance

Connector

FM

PS

### Ports

1TX/1FX = 1 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

MARS1002-1TX/1FX-1320-SC-SM-L2

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