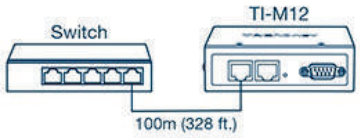


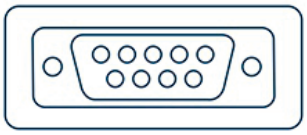
Industrial Modbus Gateway

TI-M12 (v1.0R)

- 1 x serial port, 2 x Fast Ethernet ports
- Connects RS-232/RS-422/RS-485 serial device, such as a modem, to a network
- Supports up to 32 RS-422/RS-485 TCP serial devices per port
- Supports DHCP, automatically obtain an IP address and query IP address through serial setting protocol
- Configure via web management or telnet
- Auto-MDI/MDIX, RJ45 port with 10/100Mbps
- Serial port baud rate from 50bps to 921.6Kbps
- Wide operation temperature range -40° - 75° C (-40° – 167° F)
- IP30 rated metal housing
- NDAA / TAA compliant
- Lifetime Warranty*

TRENDnet's Industrial Modbus Gateway, model TI-M12, provides one port serial connection and two fast Ethernet ports at distances up to 100m (328 ft.) using Cat5e cabling. This industrial modbus gateway allows users to connect a modbus serial device to a network.





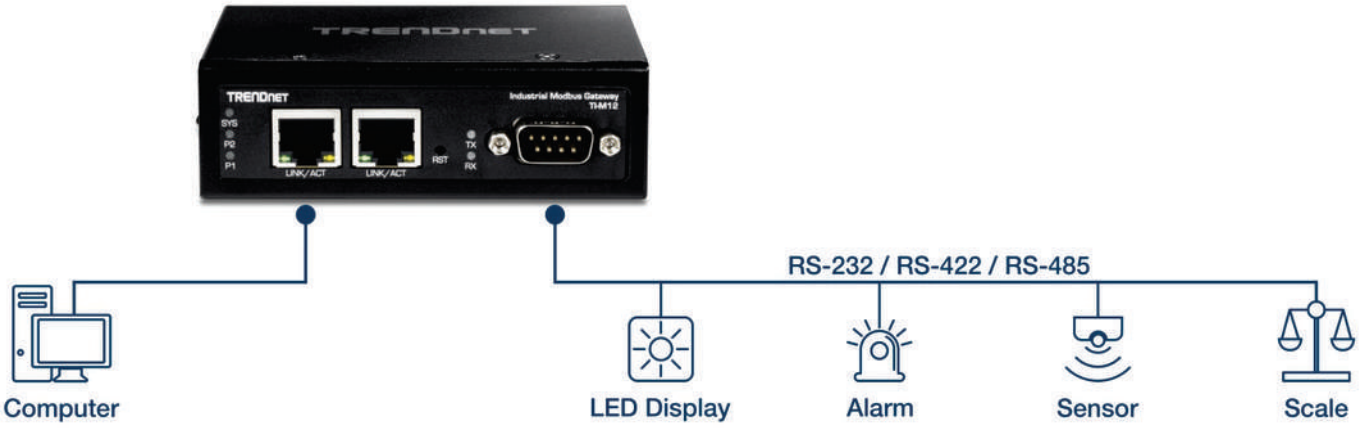


Network
Two fast ethernet ports support distances up to 100m (328 ft.) using Cat5e cabling.

Serial Connector
Easily connect RS-232/RS-422/RS-485 serial devices to the network.

Industrial Design
Designed with a rugged IP30 rated housing, vibration and shock resistance, ESD/EMI/surge protection, and a wide operation temperature range -40° - 75° C (-40° – 167° F).

NETWORKING SOLUTION





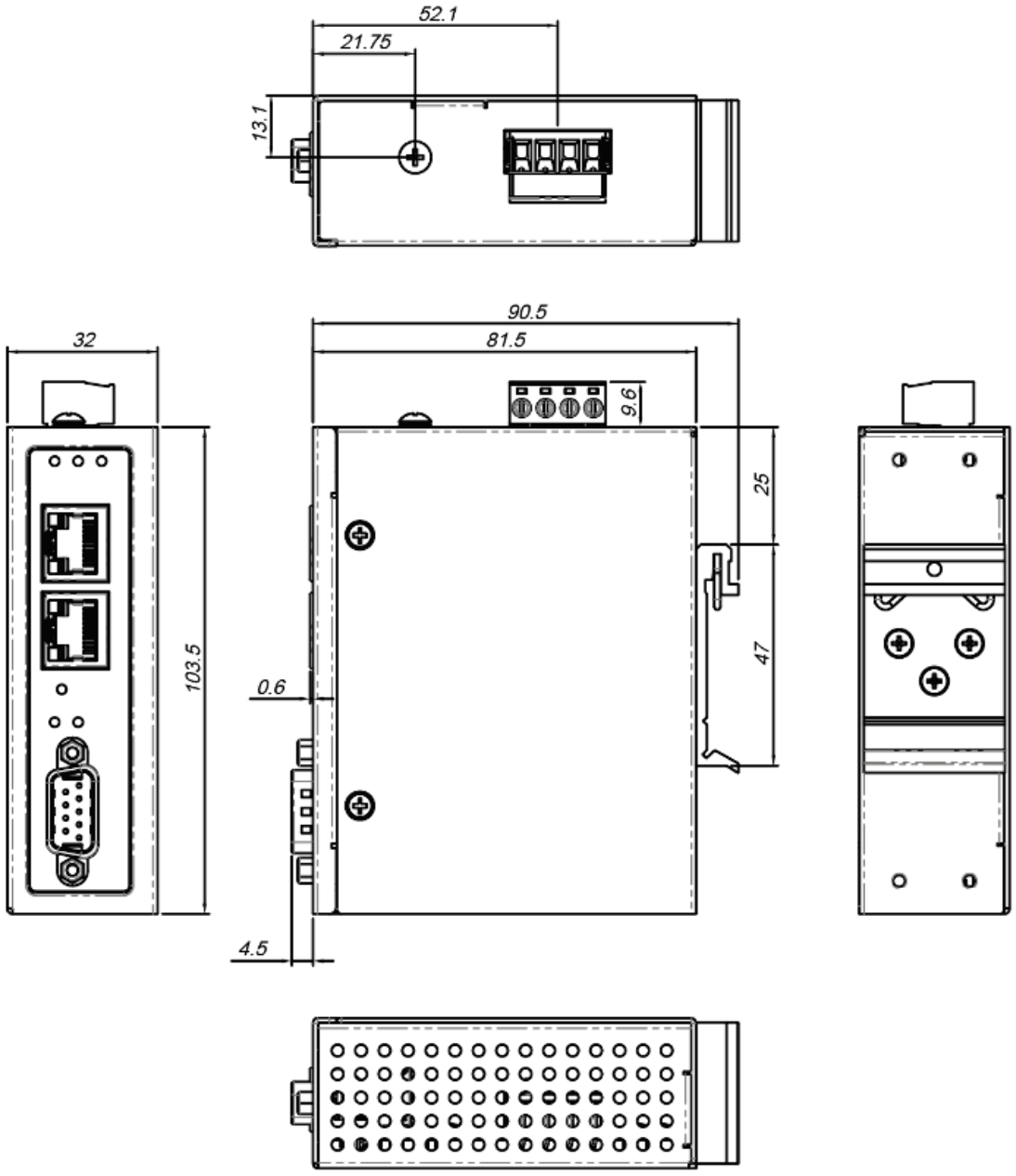
FEATURES

Network
This modbus converter features two fast ethernet ports that support distances up to 100m (328 ft.) using Cat5e cabling

Serial Connector
The modbus RTU to TCP gateway easily allows users to connect RS-232/ RS-422/RS-485 serial devices to the network

Industrial Design
This modbus gateway is designed with a rugged IP30 rated housing, resistance to a high degree of vibration and shock, protection against ESD/EMI/surges, and a wide operation temperature range -40° - 75° C (-40° – 167° F)

HOUSING DIMENSION (mm)



SPECIFICATIONS

Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- RFC 768 UDP
- RFC 793 TFTP
- RFC 791 IP
- RFC 792 ICMP
- RFC 854 Telnet
- RFC 958 NTP
- RFC 1591 DNS (client only)
- RFC 1908 SNMP v2c
- RFC 2068 HTTP
- RFC 2131 DHCP Client
- EIA / TIA RS-232 / RS-422 / RS-485

Device Interface

- 1 x Serial (DB-9) port
- 2 x 10/100Mbps ports
- 4-pin removable terminal block
- LED indicators
- DIN-Rail mount
- Wall mount
- Grounding point

Data Transfer Rate

- 50bps – 921600bps

Performance

- Data RAM Buffer: 8 Bit
- MAC Address Table: 2K entries
- Parity Type: Even, Odd, None, Space, Mark
- Stop Bit: 1 or 1.5/2

Special Features

- Supports RS-232, RS-422 and 2-wire RS-485
- Web / Telnet / Windows ®-based management
- Supports RTU Master / Slave and ASCII Master / Slave
- Hardened components rated for extreme temperatures
- Redundant power inputs

DC Power

- Input: 12 – 56 V DC
- Compatible power supply: TI-M6024 (sold separately)
- Max. consumption: 3.84W @ 48V DC

Terminal Block

- Redundant power inputs, 4-pin
- Wire range: 0.34mm^2 to 2.5mm^2
- Solid wire (AWG): 12-24/14-22
- Stranded wire (AWG): 12-24/14-22
- Torque: 5 lb. – In / 0.5Nm / 0.56 Nm
- Wire strip length: 7-8mm

MTBF

- 521,243 hours

Housing

- IP30 metal case
- DIN-Rail mount
- Grounding point

Operating Temperature

- - 40° – 75° C (-40° – 167° F)

Operating Humidity

- Max. 95 % non-condensing

Dimensions

- 103 x 80 x 31mm (4 x 3.14 x 1.22 in.)

Weight

- 154g (5.4 oz.)

Certifications

- CE
- FCC
- Shock (IEC 60068-2-27)
- Freefall (IEC 60068-2-32)
- Vibration (IEC 60068-2-6)
- IEC 61000-4-2
- IEC 61000-4-4
- IEC 61000-4-5

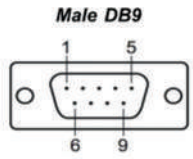
Warranty

- Lifetime Warranty*

Package Contents

- TI-M12
- Quick Installation Guide
- Removable terminal block
- DIN-Rail and wall mount kit

Pinout



Pin	1	2	3	4	5	6	7	8	9
RS-232	DCD	RxD	TxD	DTR	GND	DSR	RTS	CTS	-
RS-422	TxD+ (A)	TxD- (B)	RxD- (B)	RxD+ (A)	GND	-	-	-	-
RS-485	-	-	Data- (B)	Data+ (A)	GND	-	-	-	-

All references to speed are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.

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