

# **LP Technical Development Ltd**

# MGW101-1D(RS485)/1TX

1 x RS485/422 To Ethernet(10/100M) Modbus Gateway



#### Introduction

MGW101-1D(RS-485) is an industrial Ethernet Modbus gateway that converts between Modbus TCP and Modbus RTU/ASCII protocols. It provides 1 port RS-485/422 serial (5 bit terminal block) and 1 port 10/100M Ethernet. Modbus TCP, Modbus RTU and Modbus ASCII protocol are integrated in the products, users can easily realize the seamless integration of Modbus Ethernet devices and Modbus serial devices and even multi master and slave hybrid networks. At the same time, the user can be set up by Web or Telnet. The simple design can not only realize the fast application, but also guarantee the application of the entire real industrial environment. The products using EMC protection design, can work in rugged environment.

- 1. Support Modbus TCP, Modbus RTU, Modbus ASCII, IP, ARP, DHCP and DNS protocol
- 2.Support 1 port 10/100M Ethernet
- 3.Support 1 Port RS-485/422
- 4. Support WEB and Telnet configuration
- 5. Convert between Modbus TCP and Modbus RTU/ASCII
- 6. Support RTU Slave, RTU Master, ASCII Slave, ASCII Master four operating modes
- 7. Support ID mapping function, to achieve the management of the host ID
- 8.300bps~115200bps baud rate and nonblocking communication
- 9. Support IP address and MAC address filtering function
- 10. Slave mode support 16 TCP master connections
- 11. Master mode support 32 slave TCP connection requests
- 12. Support Response Timeout and Interval Timeout setting
- 13. Support cross-gateway and cross-router communication
- 14.IP30 protection grade, metal shell, wall mounted installation
- 15.No fan, low consumption design
- 16.Working temperature: -40 $\sim$ 75  $^{\circ}{\rm C}$



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# **Specification**

#### **Ethernet port**

Standard: 10Base-T, 100Base-TX

Protocol: Support Modbus TCP, Modbus RTU, Modbus ASCII, IP, APR, ICMP, DNS and DHCP

Signal: Rx+, Rx-, Tx+, Tx-

Speed: 10/100Mbps

Working: Full-duplex and half duplex

Transfer distance: 100m

Connector: RJ45

Serial port

Serial port number: 1 ports RS-485/422

RS-485 signal: D+ (A), D- (B) RS-422 signal: T+, T-, R+, R-

Parity bit: None, Even, Odd, Space, Mark

Data bit; 7bit, 8bit Stop bit: 1bit, 2bit

Baud rate: 300bps ~ 115200bps

RS-485/422 transfer distance: 1200m

RS-485/422 connector: 5 bits terminal block

Protection: class 3 static

Master mode: 32 TCP slaves

Slave mode: 16 TCP masters

Work mode: RTU Slave, RTU Master, ASCII Slave, and ASCII Master

## **LED Indicator**

Power (PWR)

Ethernet port connect status (Link) Serial port data indicator: TX, RX

#### **Power requirements**

Input voltage: 9~48VDC

No-load consumption: 0.90W@9VDC Full-load consumption: 1.16W@9VDC

#### **Environment limits**

Working temperature: -40~75℃ Storage temperature: -40~85℃

Relative humidity: 5%~95% (non-condensing)

#### Mechanical

Shell: IP30 protection, metal shell





Installation: Wall mounting

Weight: 230g

Size (L×W×H): 100mm×69mm×22mm

# Standard

EMI: EN 55022 Class A, FCC Part 15 Subpart B Class A

EMS: EN 61000-4-2 (ESD), Level 3

Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6

## Warranty

Warranty time: 3 years

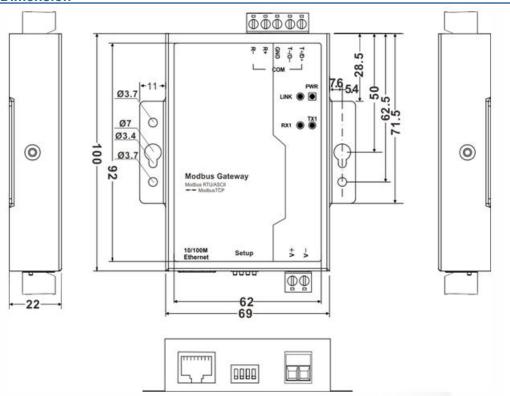
## Certificates

CE, FCC, RoHS, UL508 (pending)

# Optional accessories:

DIN-Rail Mounting Kit (35mm) ×1

# **Dimension**





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| Order Information |   |
|-------------------|---|
| MGW101-           | <del>-</del>                                      |
|                   | Ports PS  |
|                   |   |
| <u>Ports</u>      |   |
| 1D(RS485)/1TX     | = 1 x RS485/422 Port, 1 x 10/100BASE-TX RJ45 Port |
|                   |   |
|                   |   |
| PS: Power Supply  |   |
| L1 :              | $9{\sim}48$ VDC, single power input               |
|                   |   |

Example Order Codes

MGW101-1D(RS485)/1TX-L1

1 x RS485/422 Port, 1 x 10/100BASE-TX RJ45 Port,9 $\sim$ 48VDC,single power input