



### Description

- Modbus Gateway & Data Logger RM-012-G: A device that reads data from Modbus RTU and Modbus TCP/IP and logs the data into CSV files on an internal 32GB SD card.
- Supports a maximum of 1,024 readable tags.
- Supports downloading CSV log files from the SD card via an FTP server.
- Supports backing up CSV log files via a USB drive and FTP client.
- Provides 1 channel of RS-485 Modbus RTU Master and 1 channel of USB-to-RS-485 Slave.
- Equipped with a LAN TCP/IP port for FTP Server, FTP Client, Modbus TCP/IP Server, Modbus TCP/IP Client, Web configuration, MQTT, and network connection to the Prisoft server.
- Alarm notification.
- Operation status indication via LEDs: Power, Status, RS-485 TX/RX, Alarm, and Backup.
- Includes switches for Reset IP and Start Backup control.
- DIN rail mounting.

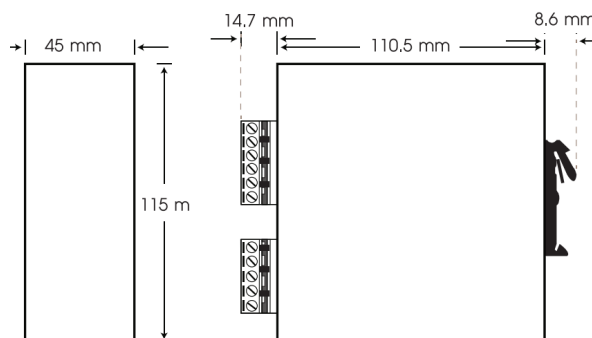
### Specification

|                          |                       |                                                                                                |
|--------------------------|-----------------------|------------------------------------------------------------------------------------------------|
| Power Supply             |                       | 24VDC/AC $\pm 15\%$                                                                            |
| Display                  |                       | 1 LED (Show Status power supply)                                                               |
|                          |                       | 1 LED (Show Status Function)                                                                   |
|                          |                       | 1 LED (Show Status Tx)                                                                         |
|                          |                       | 1 LED (Show Status Rx)                                                                         |
|                          |                       | 1 LED (Show Status Alarm)                                                                      |
|                          |                       | 1 LED (Show Status UDrive)                                                                     |
|                          |                       | RJ-45, 10/100 Base-T Half/Full Duplex                                                          |
| Protection Port Ethernet |                       | Ethernet port 1.5 KV                                                                           |
| Serial Port              |                       | RS-485 Modbus RTU                                                                              |
| TCP Port                 |                       | TCP Server, TCP Client                                                                         |
| USB Port                 |                       | U Drive, Extension RS-485 Slave                                                                |
| Communi-<br>cation       | Protocol              | Modbus RTU ,Modbus TCP ,MQTT ,MQTTS ,FTP                                                       |
| Memory<br>Log            | Communication<br>mode | Modbus Master, Modbus TCP Server, Modbus TCP Client, MQTT Client, MQTTS, FTP Client,FTP Server |
|                          | Address               | 1-255                                                                                          |
|                          | Baud rate             | 9600, 19200, 38400, 57600                                                                      |
|                          | Parity                | None, Even, Odd                                                                                |
|                          | Data Bit              | 8                                                                                              |
|                          | Stop Bit              | 1                                                                                              |
|                          | SD Card               | 32Gbytes                                                                                       |
| Ambient<br>Operation     | Temperature           | 0°C to 50°C                                                                                    |
|                          | Humidity              | Over Temperature Protection                                                                    |
| Ambient<br>Storage       | Temperature           | 0°C to 65°C                                                                                    |
|                          | Humidity              | <85%RH                                                                                         |
| Protection degree        |                       | IP 20                                                                                          |
| Connection Terminal      |                       | 2.5 mm <sup>2</sup> Pluggable Screw Type                                                       |
| Installation             |                       | DIN RAIL Mounting                                                                              |
| Material                 |                       | Aluminium                                                                                      |
| Size (mm.)               |                       | 45 x 115 x 110.5                                                                               |
| Weight (kg.)             |                       | 340                                                                                            |

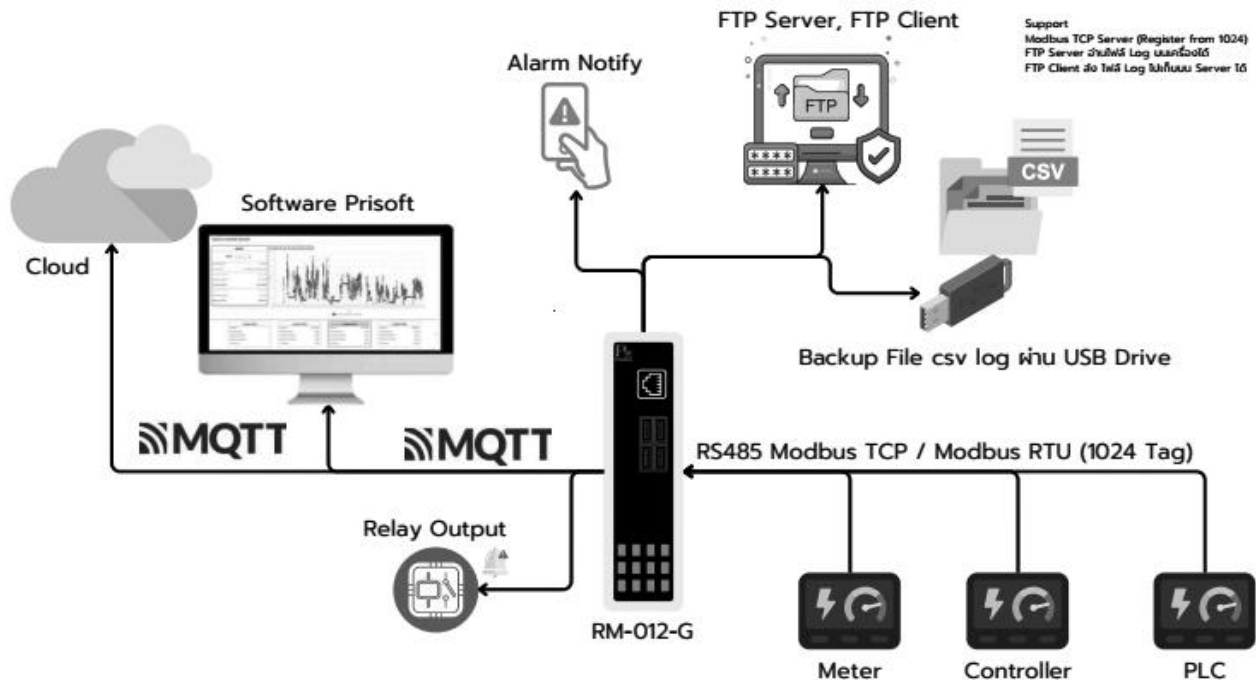
### Operation

RM-012-G operates as a Data Logger, Converter, and Gateway in a single device. It reads data from Modbus RTU and Modbus TCP/IP and logs the data as CSV files on a 32GB SD card. It supports a maximum of 1,024 readable tags, allows CSV log file backup via USB drive and FTP client, and can transmit data via the MQTT protocol to send data to the cloud and Prisoft software.

### Dimension



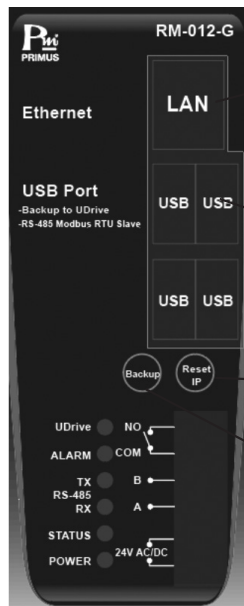
## Wiring Diagram



The example of application

## Display Information

## Ordering Code



Size and Dimensions

LAN Connector For

- Modbus TCP/IP Server
- Modbus TCP/IP Client
- File Transfer FTP Server
- File Transfer FTP Client
- MQTT for Prisoft Format

USB option

- Backup CSV Log files to UDrive
- RS-485 Modbus RTU Slave

SW Reset IP

Press and hold for 3 sec. for Reset IP is default.

IP : 192.168.100.99

Netmask : 255.255.255.0

Gateway : 192.168.100.1

SW Backup

Press and hold 3 sec. to start backup from SD Card to UDrive LED UDrive Status

IP : 192.168.100.99

BackUp : Blinking fast and continue

UDrive Connected : Blinking slow and continue

RM-012-G

|        |              |
|--------|--------------|
| UDrive | LED POWER    |
| ALARM  | LED STATUS   |
| Tx     | LED TX RS485 |
| RS-485 | LED RX RS485 |
| Rx     | LED ALARM    |
| STATUS | LED UDrive   |
| POWER  |              |

Status LED

|                                                                  |                                               |
|------------------------------------------------------------------|-----------------------------------------------|
| : Steady on                                                      | When supply power is applied.                 |
| : Blinking                                                       | When the system is ready                      |
| : Steady on                                                      | When the RESET IP button is pressed and held. |
| : Blinking                                                       | When sending Modbus RTU commands.             |
| : Blinking                                                       | When receiving Modbus RTU commands.           |
| : Steady on                                                      | When an alarm event occurs.                   |
| : Steady on                                                      | When a USB drive is connected.                |
| : Blinking                                                       | When the Backup switch is pressed.            |
| (Data logged on the SD card is being backed up to the USB drive) |                                               |