

# EMH-2M-R

## Smart Gateway



EMH-2M-R is specially designed for residential, small-sized C&I scenario with multiple device access. It supports diverse device types, such as module PV optimizers, inverters, batteries, meters, and etc..

Meanwhile, it supports data transmission via Ethernet and WiFi. This helps users improve the efficiency of remote monitoring and management, facilitating multiple functionalities such as data collection and reporting, configuration deployment, firmware upgrade, and real-time control.

## I Applicable Scenarios

Suitable for residential, small-sized C&I scenario with multiple device access

## I Core Values

- Real-time monitoring and management of new energy equipment
- Remote upgrade of equipment
- Analyze and optimize the consumption and power generation data to achieve refined operation and maintenance(O&M)
- Centralize the management of multiple equipments to realize quick fault location and reduce O&M losses

## I Features

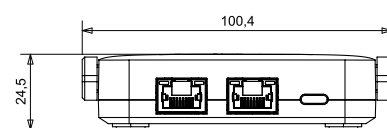
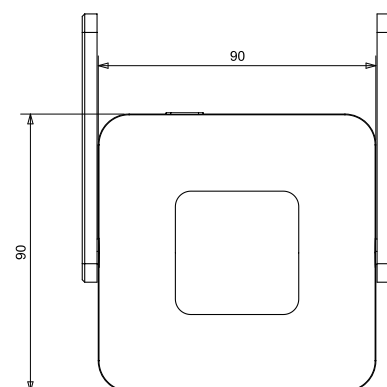
- Supports Bluetooth network distribution, with a fast and high success rate
- Built-in edge-side twin model for fast customization and adaptation
- Supports access to inverters, batteries, meters, optimizers and other new energy devices
- Support Ethernet, WiFi and other communication methods to upload data to the cloud platform
- Extends the monitoring range of devices through LoRa to ensure the stability and reliability of data transmission
- Complies with EN 18031 IoT network security standard

# I Parameters

| Communication Parameters |                              |
|--------------------------|------------------------------|
| LoRa Operating Frequency | 868MHz                       |
| Ethernet                 | 1 channel 10/100M adaptative |
| WiFi Specification       | WiFi 6 (IEEE802.11b/g/n/ax)  |
| WiFi Operating Frequency | 2400 ~ 2483.5MHz             |
| BLE Standard             | BLE 5.3                      |
| BLE Operating Frequency  | 2400 ~ 2483.5MHz             |
| Antenna Type             | External/internal antenna    |

| Hardware Parameters   |   |
|-----------------------|---|
| Size ( L×W ×H )       | 122.5mm×90mm×24.5mm   |
| Installation          | Wall Mounted/Flat   |
| Operating Voltage     | DC 5V±5%  |
| Operating Power       | <4W   |
| External Interface    | RJ45 Ethernet port, RJ45 port (no light) with RS485 interface, TypeC power input port                             |
| Input Power           | 5V 2A   |
| Reset Button          | × 1   |
| Indicator Light       | LoRa status indicator light<br>Server connection status indicator light<br>Serial port connection indicator light |
| Data Storage          | Default configuration 8MB   |
| Operating Temperature | -20°C~+50°C   |
| Operating Humidity    | 10%-70% RH no condensation  |
| Storage Temperature   | -40°C~+90°C   |
| Storage Humidity      | <40% RH no condensation   |

| Software Parameters              |  |
|----------------------------------|--|
| Access Number via RS485/Ethernet | ≤10 Units                                      |
| Lora AccessNumber                | Default:1 (1-10 configurable)                  |
| Serial Port Communication Rate   | Default: 9600bps (1200-115200bps configurable) |
| Data Upload Frequency            | Default: 5 minutes                             |
| User Configuration               | Remote configuration                           |
| Firmware Upgrade                 | Remote upgrade                                 |
| Reboot Mechanism                 | Software and hardware watchdog timer           |
| Breakpoint Resuming              | Supported                                      |



Unit: mm

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