

# 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

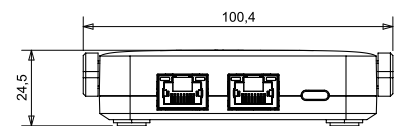
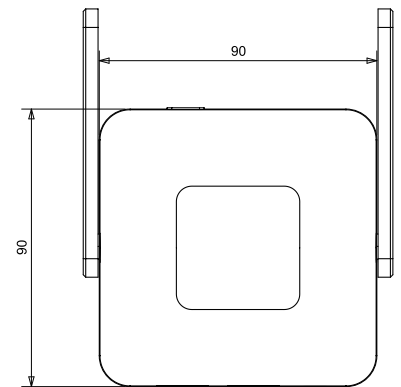
- Supports Bluetooth network distribution, with a fast and high success rate
- Built-in edge-side twin model for fast customization and adaptation
- Supports access to inverters, batteries, meters, optimizers and other new energy devices
- Support Ethernet, WiFi and other communication methods to upload 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 Server connection status indicator light 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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