SOLARMAN
Monitored Analyzed Networked

EMH-2

Smart Gateway

EMH-2 is a device specifically designed for home energy management system. It aims to help users effectively reduce energy costs, save on electricity bills, and enhance the intelligence of household energy use through real-time monitoring, analysis, and optimization of energy consumption. The device supports multiple interfaces, allowing seamless integration with various devices such as inverter, battery, EV charger, SG Ready heat pump, P1 meter, and more. It enables centralized control and optimized management of solar generation, energy storage, charging, and electricity consumption devices.

I Applicable Scenarios

Applicable to home energy management system in Europe, enhancing the efficiency of energy management.

I Core Values

- **Cost Reduction:** Reasonable use of solar, energy storage, and grid power to achieve optimal and economical energy consumption.
- **Increase Revenue:** Energy planning based on electricity tariffs to achieve peak-valley arbitrage.
- **Efficiency Enhancement:** Support local or remote monitoring to improve O&M efficiency
- **User Experience:** Visual UI interface, energy data can be displayed and viewed intuitively

I Features

- Support access to various new energy device such as inverter, battery, EV charger, heat pump, meter, and more
- Support the integration of solar, energy storage, EV charger, and electrical equipments.
- Supports communicating with cloud platform via 4G, WiFi, and Ethernet
- Embedded localized management interface, users can view production, storage,and consumption data at a glance
- Supports multiple energy strategies to help users optimize electricity usage patterns, reduce electricity bills, and improve energy efficiency
- Comply with EN303645 and implement security measures to protect data as well as users' personal information and privacy

l Parameters

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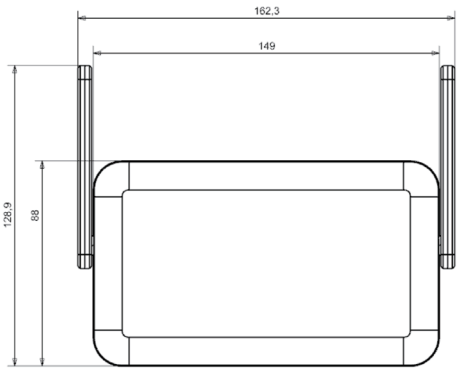
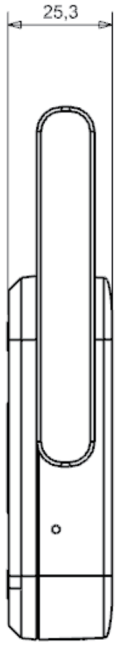
Communication Parameters	
Remote Communication	Ethernet, WiFi , 4G (optional)
Ethernet	2 channel 10/100M adaptive
LoRa Operating Frequency	868MHz
WiFi Standard	WiFi 6 (IEEE802.11b/g/n/ax)
Working Frequency	2400 ~ 2483.5MHz
Bluetooth Standard	BLE 5.3
Working Frequency	2400 ~ 2483.5MHz
Antenna	LoRa external antenna, WiFi/ Bluetooth external antenna

Hardware Parameters	
Dimensions (L x W x H)	149mm×88mm×25.3mm
Installation	Wall-mounted
Working Voltage	DC 5V ± 7%
Working Power	＜ 5W
RS485 Interface	× 3
DI Interface	× 2
DO Interface	× 2
Indicator Lights	× 6(Run, Server, 4G , LoRa , COM , P1)
Press	Reset button
Data Storage	Default: 512MB
Working Temperature	-30°C~ + 70°C
Working Humidity	10%-90% RH , non-condensing
Storage Temperature	-40°C~+90°C
Storage Humidity	<40% RH non-condensing
Protection Level	IP20

Software Parameters	
Total number of connected devices	≤32
Inverter No.	≤10
P1 No.	1
LoRa No.	Default : 1 (1~10 optional)
Serial Communication Rate	Default: 9600bps(1200-115200bps optional)
Data Upload Interval	5 mins
User Configuration	Local/Remote configuration
Firmware Upgrade	Local/Remote upgrade
Breakpoint Resume	Support





Unit: mm , accuracy ±5%

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