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Emaldo® Horizon

Specifications



Emaldo® Horizon connects heat pumps, inverters and smart meters into one intelligent energy system. It optimizes energy use, battery charging and electricity costs based on weather, pricing and household consumption.

Emaldo® Horizon

Specifications

General

Product Name	Emaldo® Horizon
Product Type	Energy Gateway
Product Model	Horizon
Dimensions	165mm × 115mm × 25mm
Enclosure Material	Flame Retardant V1 PC +ABS Material
Protection Rating	IP31
Protection Function	Short-circuit Protection, EMC (CLASS B)
Power Supply Type	Type-c Power Interface 5V~2A
Power Switch	Single click power on, Double click power off
Antenna Type	Omnidirectional Antennas
SKU	EM-GW-01

Communication Protocol

RS485*3	Meter, Inverter, Heat Pump
LAN1 (RJ45/100M Ethernet)	Router
LAN2 (RJ45/100M Ethernet)	Meter, Inverter, Private Networking
BLE 5.4 +Wi-Fi6	2.4G/5G
4G	Built-in eSIM, micro SIM card
Wi-Fi_Halow	Included
LoRa	Included

Environmental Parameters

Applicable Scenarios	Indoor
Operating Temperature	-20°C - +55°C
Operating Humidity	5% - 80%RH (Non-Condensing)
Operating Altitude	<2000m
Cooling Method	Natural Cooling

FAQ

1. What reserve mode does Emaldo® Horizon provide?

Emaldo® Horizon supports Scheduled Mode and AI Mode. Each mode is designed for different user needs - from full manual control to automated optimisation and participation in grid services.

2. Can I control the battery when using Emaldo® Horizon?

Yes. Emaldo® Horizon communicates with the inverter to automatically manage battery charging and discharging, optimising system performance while ensuring compliance with grid requirements.

3. How does Emaldo® Horizon help improve energy efficiency?

Emaldo® Horizon monitors real-time data from your inverter, battery, and smart meter. Intelligent algorithms balance self-consumption, peak shaving, and energy storage - maximising efficiency and reducing grid dependence.

4. Is my data safe when connected to Emaldo® Horizon?

Yes. All communication between Emaldo® Horizon and cloud servers is fully encrypted. Emaldo® follows strict EU GDPR standards to ensure that your personal and energy data remain secure and private.

The Emaldo® Horizon is an intelligent energy gateway that connects heat pumps, inverters, smart meters and energy storage systems into one smart home energy system. By deeply analysing data including electricity prices, weather and consumption patterns, it delivers optimal electricity strategies for battery charging and discharging, energy selling and intelligent dispatch of multiple energy resources.

