



MARSTEK VENUS E Mini

1.5kW 2kWh Plug-in Battery

Plug-in | 1.5kW Bidirectional Inverter | 2kWh

**1.5kW
Backup**

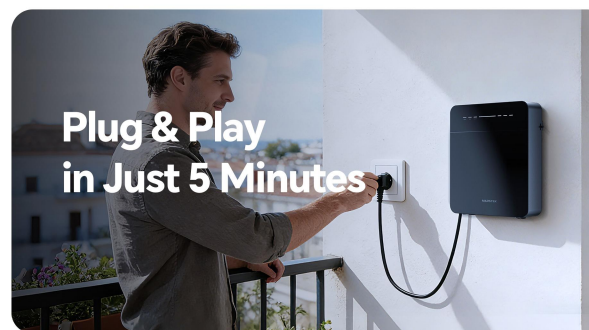
Peak at 1.8kW



AI Optimized

TOU Management
for Cost Savings

**Plug & Play
in Just 5 Minutes**



**1.5kW
Bidirectional
Power**



EPS Switchover in 10ms

A Money-Making Machine

€1.49
per Day

€542
per Year

MARSTEK VENUS E Mini



1.5kW 2kWh Plug-in Battery

Plug-in | 1.5kW Bidirectional Inverter | 2kWh



World's Thinnest Plug-in ESS



10.5cm Thin

22kg Light

**Compatible with Any
Existing Solar Systems**



Essential Home Backup

With MARSTEK SmartBox

Max. Output
1.5kW x 2 = 3kW

Max. Capacity
2kWh x 2 = 4kWh



Anti Feed-in

With Smart Meter



BMS Intelligent Protection



Protección contra
Sobretensión



Protección contra
Sobrecorriente



Protección contra
Sobredescarga



Protección contra
Cortocircuito



Protección contra
Sobretensión



Protección contra
Sobrecorriente

IP65

Waterproof & Dustproof

-20°C to 60°C

Reliable Power from



10000+ Cycles

Long-Lasting LFP Cells

Silent Operation

Sub-30dB

VENUS E Mini vs VENUS E 3.0

Two Solutions. Two Scenarios.

MARSTEK VENUS E Mini

Size: 386 × 450 × 105 mm

Weight: 22 kg



-  105mm Ultra-Slim
-  Wall-mounted Design, Max Space Savings
-  Grid Supply + Backup Power, True Plug-and-Play
-  Scalable to 4.5kW/6.27kWh with SmartBox
-  Compact Plug-in ESS, Ideal for Every Home



MARSTEK VENUS E 3.0

Size: 480 × 624 × 153 mm

Weight: 60 kg

-  Floor-standing Integrated Design
-  Grid / Backup / Ethernet / RS485 Support
-  Up to 7.5 kW / 15.36 kWh with SmartBox
-  High-Capacity Energy Hub
-  For Power Users and Advanced Energy Systems

Application Scenarios



Bidirectional Power & Ample Capacity

1.5kW On-Grid Input

800W / 1.5kW On-Grid Output

2kWh Capacity

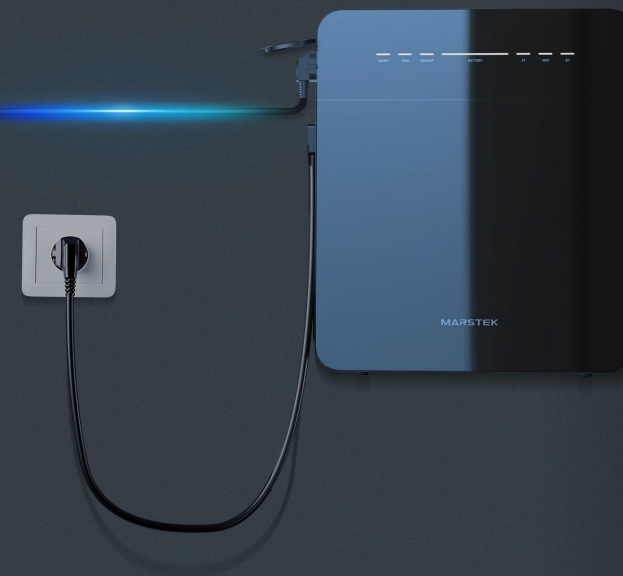


Superior Backup Power

EPS Switchover in 15ms

1.5kW Backup Power

Peak at **1.8kW**



Minimal Investment, Maximum Savings

€533
YEAR

€1.46
DAY

VENUS E Mini + 1200W Solar Panels + 800W Micro Inverter

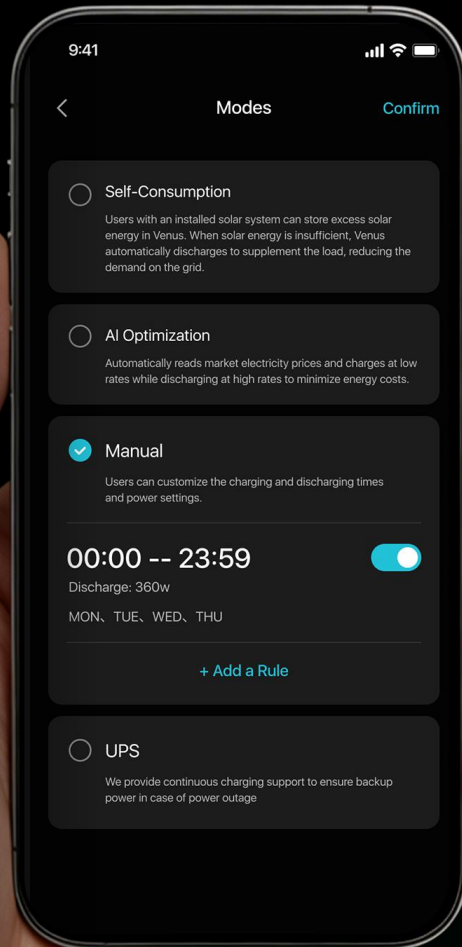
533€ / YEAR

1200W Solar Panels + 800W Micro Inverter

139€ / YEAR

Marstek App Integration

Real-Time Monitoring & Control



Manual Mode

Set discharge/charge schedule, power and days for working automatically.



Self-Consumption

The device discharges power in accordance with load consumption and stores surplus solar energy.



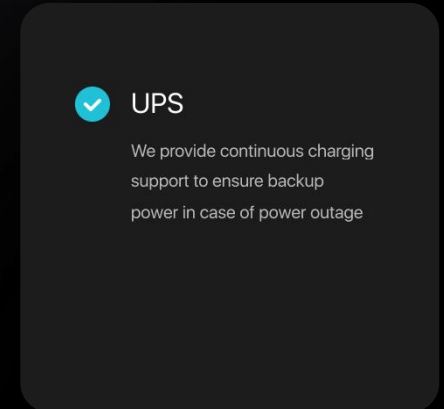
AI Mode

The device charges at the lowest electricity rate available. This mode also includes the function of Self-Consumption.



UPS Mode

For areas with frequent power outages (e.g., Ukraine, Africa)



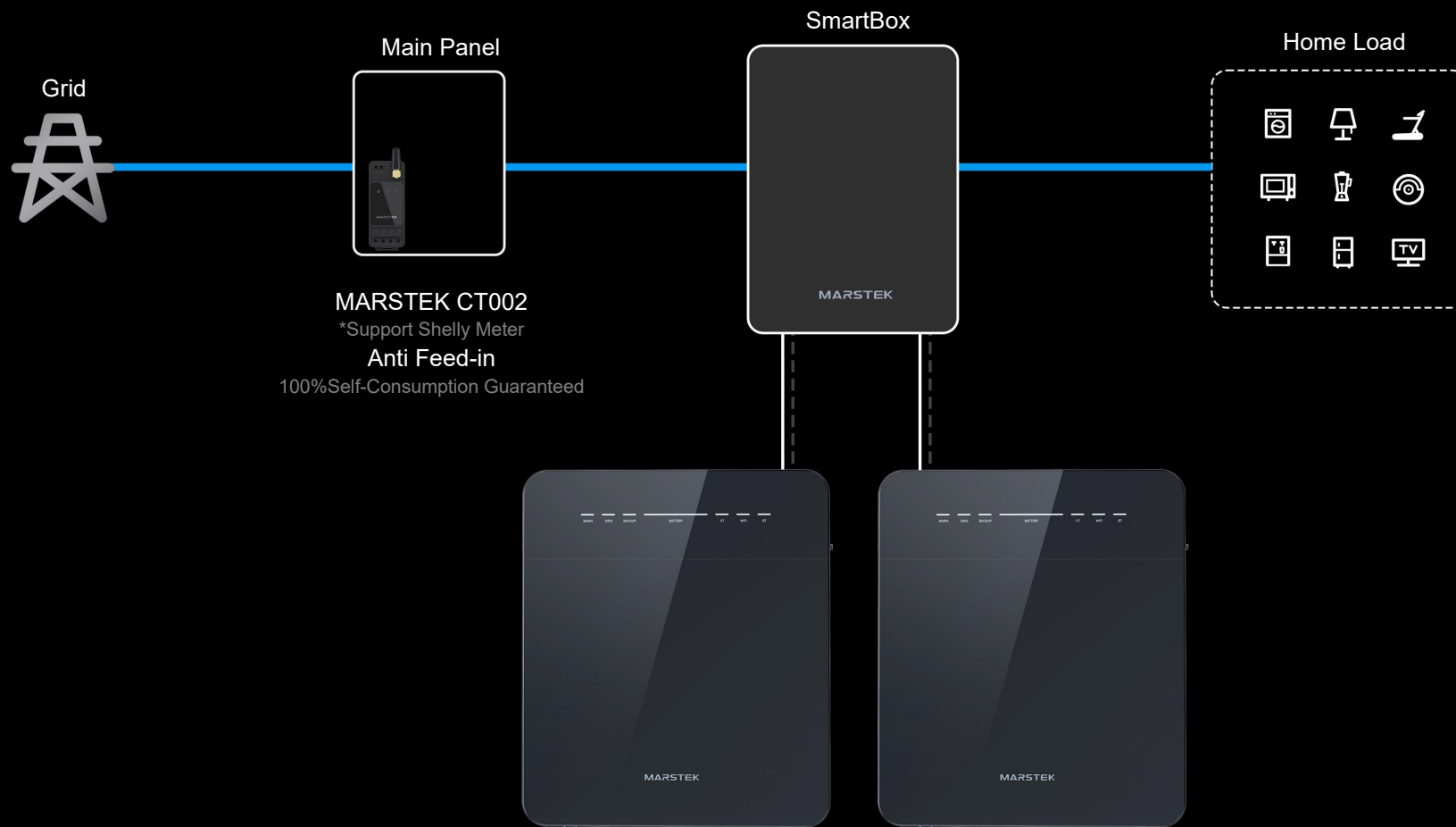
Single-Phase Backup ESS

Max. Output

$1.5\text{kW} \times 2 = 3\text{kW}$

Max. Capacity

$2\text{kWh} \times 2 = 4\text{kWh}$



The image shows a modern, two-story house with a white exterior and a grey tiled roof. Several black solar panels are installed on the roof. A balcony with a glass railing is visible on the second floor. On the white wall of the house, a black solar inverter and a power distribution unit are mounted, connected by wires to the solar panels. The background is a lush green landscape with trees.

Compatible with Any PV Systems

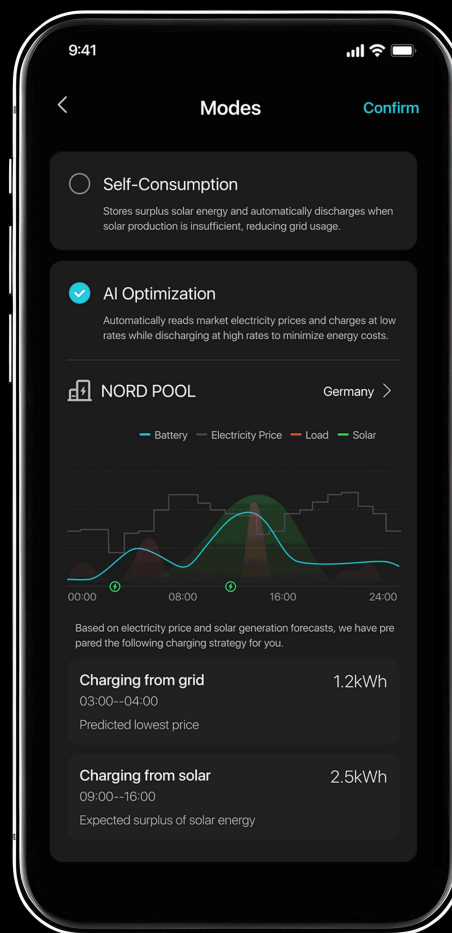
Seamless Integration, No rewiring, No
Upgrades, Just More Solar Utilization.

MARSTEK Intelligence

AI-Powered Energy Optimization

Load Prediction

TOU Management



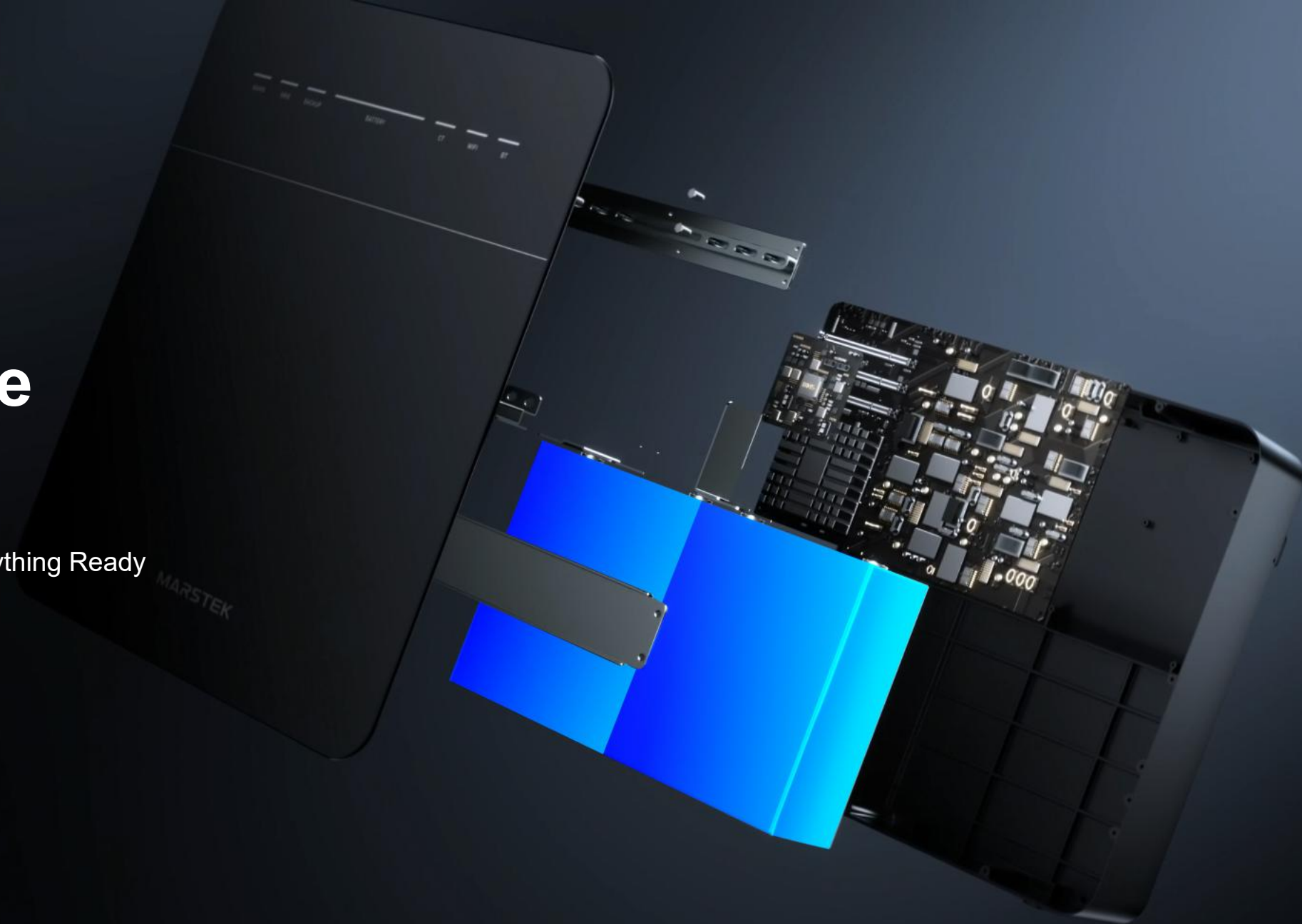
Daily Energy Planning

Real-Time Monitoring

Data Logging & Tracing

All-in-One Design

Everything Built-in, Everything Ready



Plug & Play

Connect & Go, Powered in Seconds



Small in Size, Strong in Performance

Wall-Mounted Design
for Space-Saving

Full-Back Heat Dissipation
Safer & More Efficient



10.5cm

World's Thinnest Plug-in ESS

22kg

Lightweight at 22kg for Easy Moving



Flexible Backup Power Even Off the Wall

Compact and Lightweight for Easy Moving

Professional MST-Grid Port



Enhanced Connection Stability



Reliable Grid Integration



Higher Safety & Compatibility



LED Display

Instant Status Feedback at a Glance

① Warning indicator

② Grid socket on

③ Backup socket on

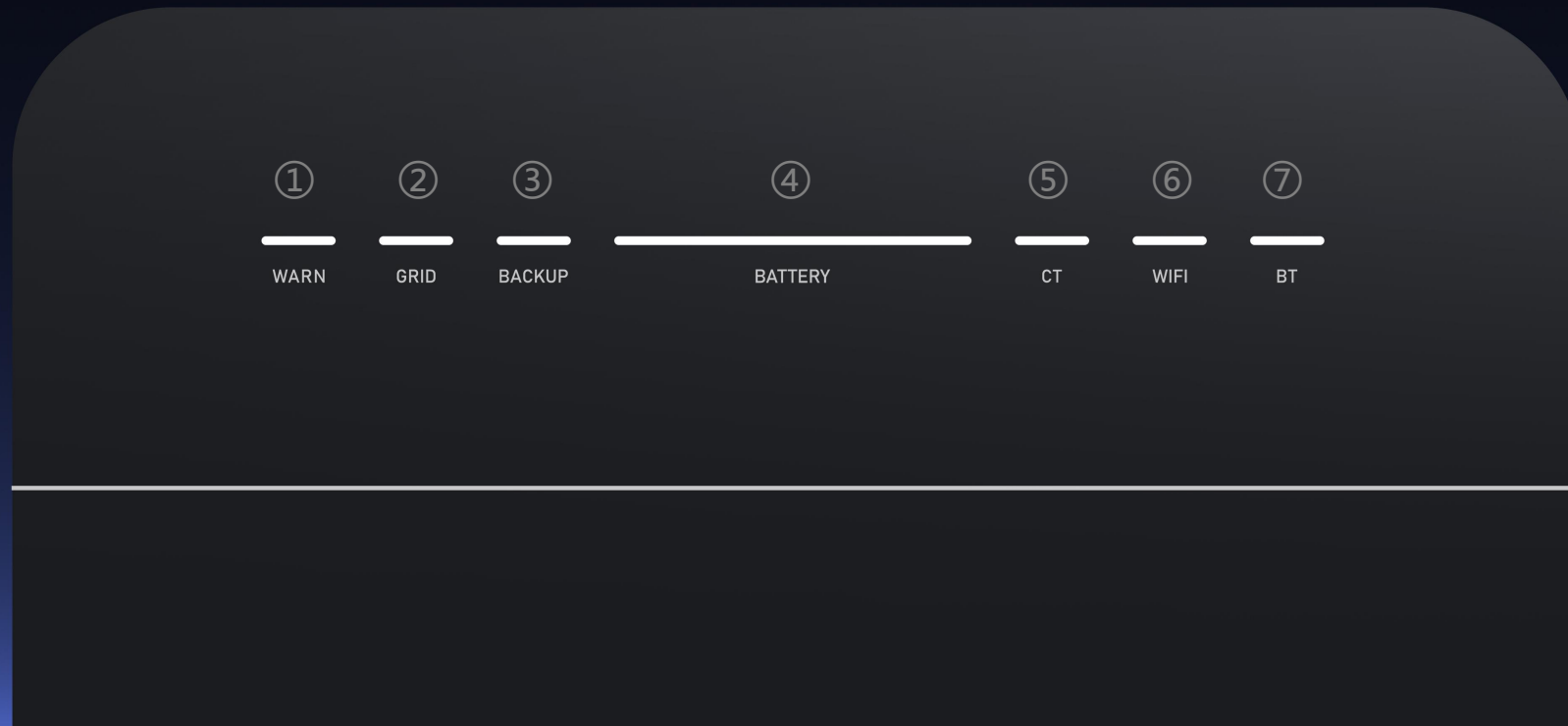
④ Capacity Indicator

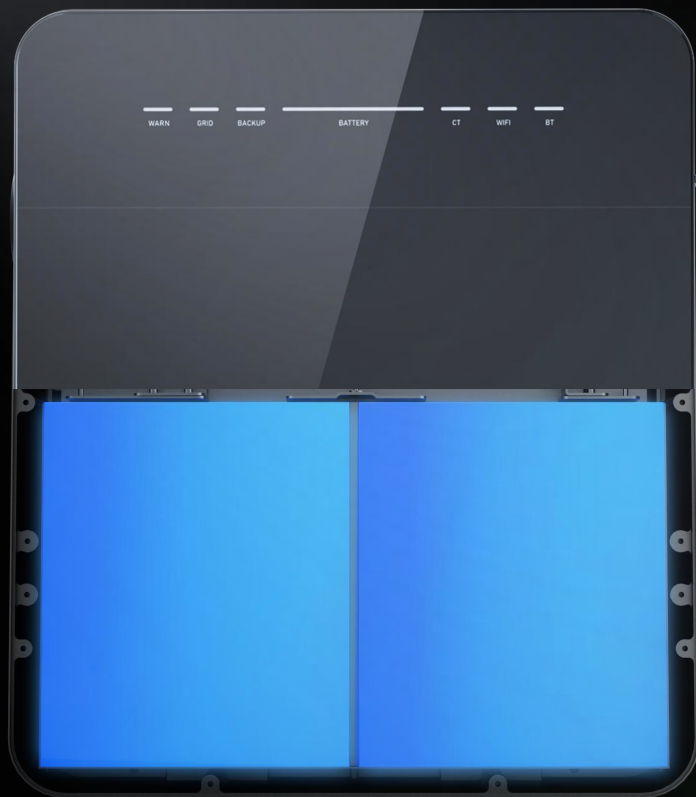
Flashing from left to right for charging,
right to left in discharging

⑤ CT connected

⑥ Wi-Fi connected

⑦ Bluetooth connected





Built to Last

LFP Battery

Stable, non-flammable chemistry for superior safety.

10000+ Cycles

After 10000 cycles, the battery capacity remains at 80%.

314Ah Cell

Simplified design, higher density, and superior reliability.

10-Year Warranty

Peace of mind & long-term support.

BMS Intelligent Protection



Overcharge Protection



Overdischarge Protection



Overcurrent Protection



Overvoltage Protection



Short-Circuit Protection



Overtemperature Protection

IP65

Waterproof & Dustproof



Waterproof Cover



-20°C to 60°C

Reliable Performance in Extreme Cold



Silent Operation

Noise level below 30dB



VENUS E Mini

1.5kW 2kWh Plug-in Battery



Model	MARSTEK VENUS E Mini
Host Battery Parameters	
Rated Voltage	6.4V
Capacity	2009.6Wh (314Ah*2S)
Cycle Life	>10000 (25°C)
Battery Cell Type	LiFePO ₄
Depth of Discharge (DoD)	90%
AC Input	
Rated Input Power	1.5kVA
Working Phase	L/N/PE
Rated Grid Voltage / Frequency	230V/50Hz
Rated Grid Input Current	6.52A
Power Factor	>0.99 (default), 0.8 lagging...0.8 leading (adjustable)
THDi	<3%
AC Output	
Rated Output Power	800VA/1.5kVA
Working Phase	L/N/PE
Rated Grid Voltage / Frequency	230V/50Hz
Rated Grid Output Current	3.48A/6.52A
Power Factor	>0.99 (Default), 0.8 lagging...0.8 leading (Adjustable)
THDi	<3%
Backup (Off-Grid)	
Rated Input/Output Power	1.5kVA
Peak Input/Output Power	1.8kVA (60s)
Rated Input/Output Current	6.52A
Rated Voltage / Frequency	230V/50Hz
THDu (Linear Load)	<3%
Efficiency	
Battery Side – AC Side Maximum Efficiency	>88%
Protection	
Protection Class	I
Overvoltage Withstand Level	DC II /AC III
General	
Ambient Temperature Range	-20°C ~ +60°C (Storage: -30°C ~ +85°C)
Dimensions	386 × 450 × 105 mm
Weight	22kg
Relative Humidity	≤95%
IP Rating	IP65
Cooling Method	Natural Cooling
Maximum Operating Altitude	2000m
Grid-Connected Port	MST-Grid Port
Off-Grid Port	European Socket
Display	LED
Communication Interfaces	Bluetooth, Wi-Fi

THANKS!

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