

MARSTEK

Power Anywhere & Anytime

www.marstekenergy.com

MARSTEK VENUS E Gen 3.0

Plug-in AC Battery Energy Storage System



Smaller. Lighter. More Efficient.

The Best AC Battery, Now Even Better



VENUS E Gen 3.0

- ⚡ 1、Integrated PCB: 50% less wiring, +5% round-trip efficiency
- ⚡ 2、Brand New Design
- ⚡ 3、38.5% Smaller, 7.4% Lighter
- ⚡ 4、Premium Aluminum Die-Cast Housing
- ⚡ 5、Dual RJ45: RS485 & Ethernet
- ⚡ 6、High Performance, High Density New Battery Cells
- ⚡ 7、Thermally Conductive Potting



VENUS E Gen 2.0

- 1、Multiple PCB Boards with Complex Wiring, Higher Energy Loss
- 2、Traditional Right-Angle Design
- 3、Larger & Heavier Form Factor
- 4、Steel Housing
- 5、Single 5-pin RS485 Port

VENUS E Gen 3.0 — Key Upgrades over Gen 2.0

Integrated PCB Design

50% Less Wiring
PCS Efficiency > 98%



Upgraded 100Ah Prismatic Cell

Higher Strength, Greater Safety
Better Heat Dissipation



Thermally Conductive Potting

Enhanced Thermal Management
Superior Shock & Moisture Protection



Unibody Aluminum Die-Cast Housing

Higher Strength
Greater Durability



Plug & Play

2.5kW

Input

800W / 2.5kW

Output

5.12kWh

Capacity



Backup Essential Loads

Max.

2.5kW Output

Switchover in **15ms**



Compatible with Any PV System

Upgrade existing PV system with storage system

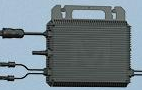


Main Panel

Solar Panel



PV Inverter



Micro Inverter

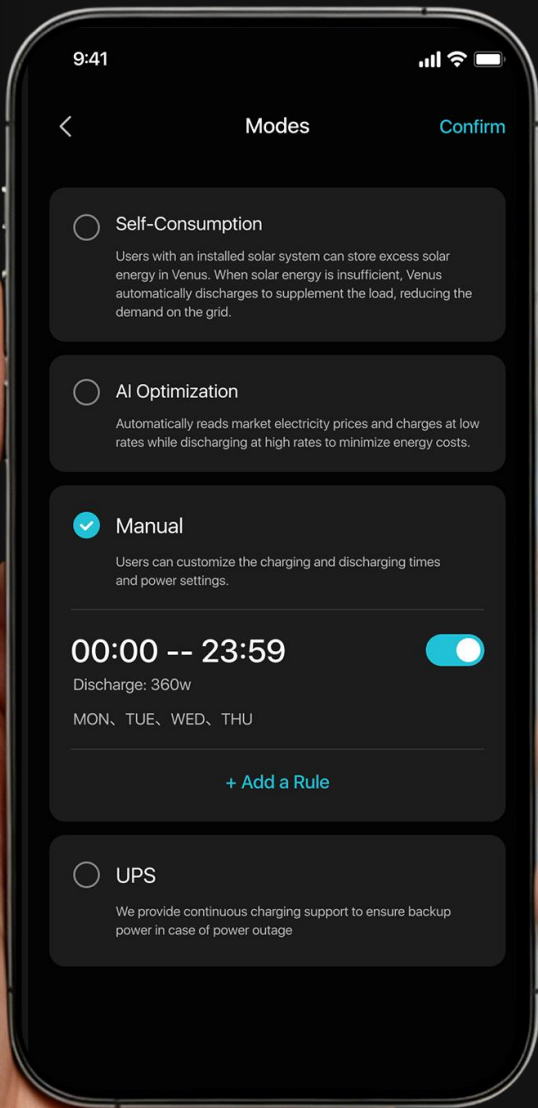
Solar Panel



Benutzerfreundliche MARSTEK App

Intuitiv & übersichtlich & anpassbar





Manual Mode

Full Control Over Your Energy

Key Points

- Customize charging & discharging schedules
- Set power levels based on your needs
- Flexible operation for different scenarios

Benefits

- Adapt to your daily routine
- Maximize self-consumption of solar energy
- Take control of your energy costs

Self-Consumption

Smart & Effortless Energy Optimization

Points

- Works with smart meters for real-time monitoring
- Enables precise zero feed-in control
- Automatically adjusts charging and discharging

Benefits

- Maximize energy efficiency
- Prevent excess energy export
- Hassle-free operation, no manual setup needed

UPS Mode

Reliable Power When You Need It Most

Points

- Ideal for areas with frequent power outages
- Automatically charges battery when grid is available
- Ensures maximum backup capacity

Benefits

- Keep essential devices running during outages
- Stable and uninterrupted power supply
- Peace of mind in unstable grid conditions

AI Mode

Maximize Savings with Intelligent Energy Management

Key Points

- AI analyzes home energy usage, pricing, and load patterns
- Real-time optimization of charging & discharging
- Dynamic strategy based on electricity price changes

Benefits

- Charge during off-peak, discharge during peak
- Reduce electricity bills automatically
- Turn energy management into real savings



AI Optimization Mode

Maximize Lower Bill

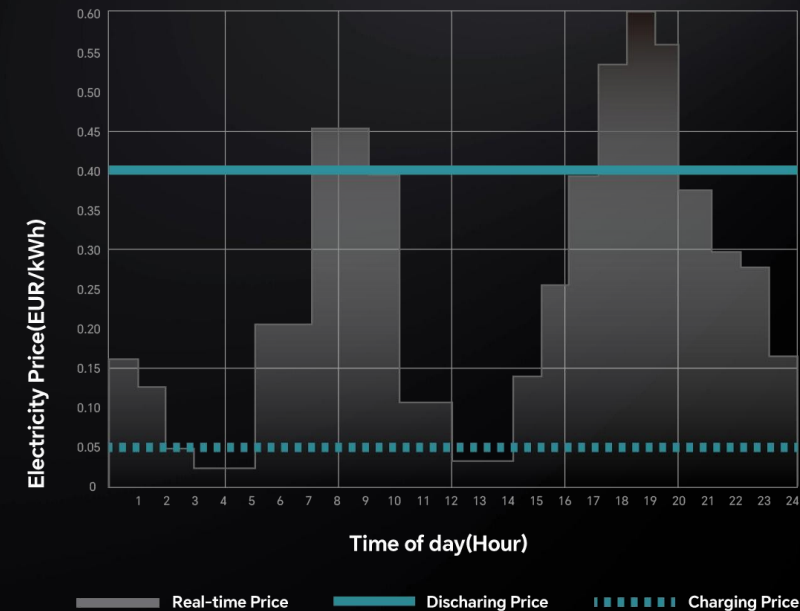
For residential users, Marstek Venus utilizes AI models to perform comprehensive big-data analysis of the entire home energy system status, real-time electricity pricing, and load patterns, then calculate the dynamic charging / discharging strategy for the maximize saving.



Manual Mode

Profit From TOU

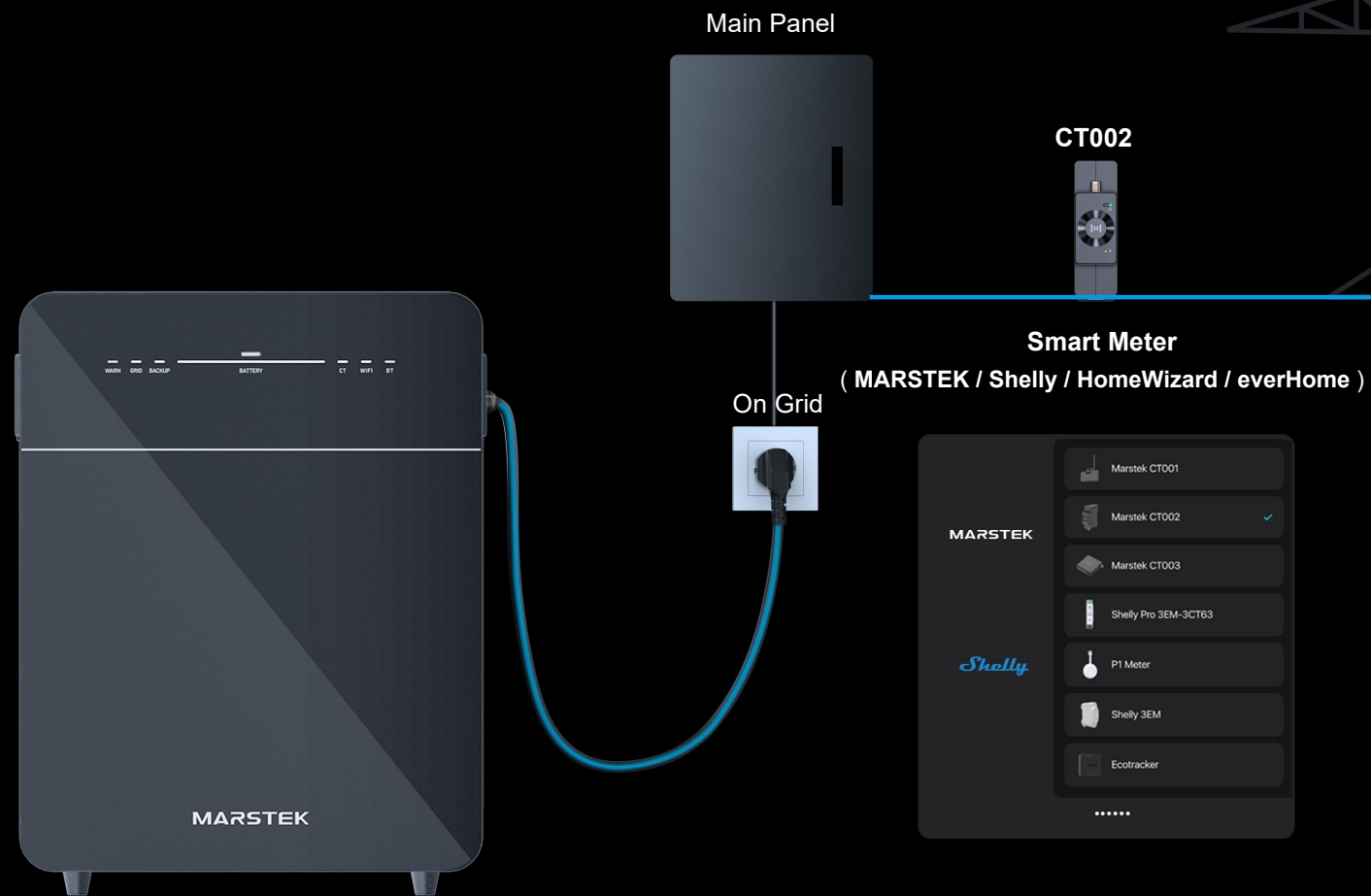
For enterprise users, manually configure charging / discharging periods and power based on time-of-use pricing(TOU) agreed with grid operators, enables the maximum profit.



Anti Feed-in

100%

Self-Consumption

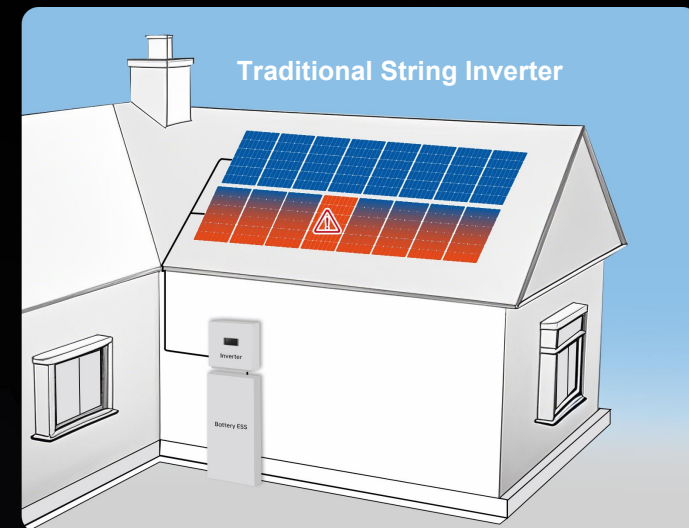
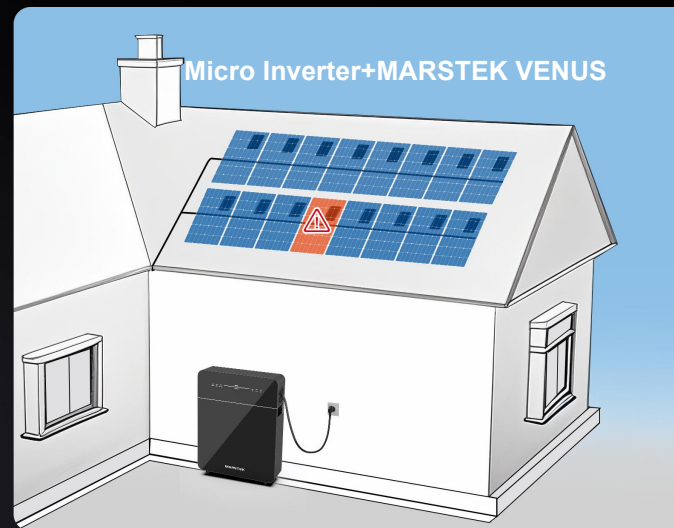


Flexible & Efficient Distributed ESS

60% ↑

Higher efficiency
than string PV systems

Minimal impact on generation
during partial issues



Support Multiple VENUS E Grid Connection

2.5kW x N

Max. Input / Output

5.12kWh x N

Capacity



Single-Phase Backup ESS

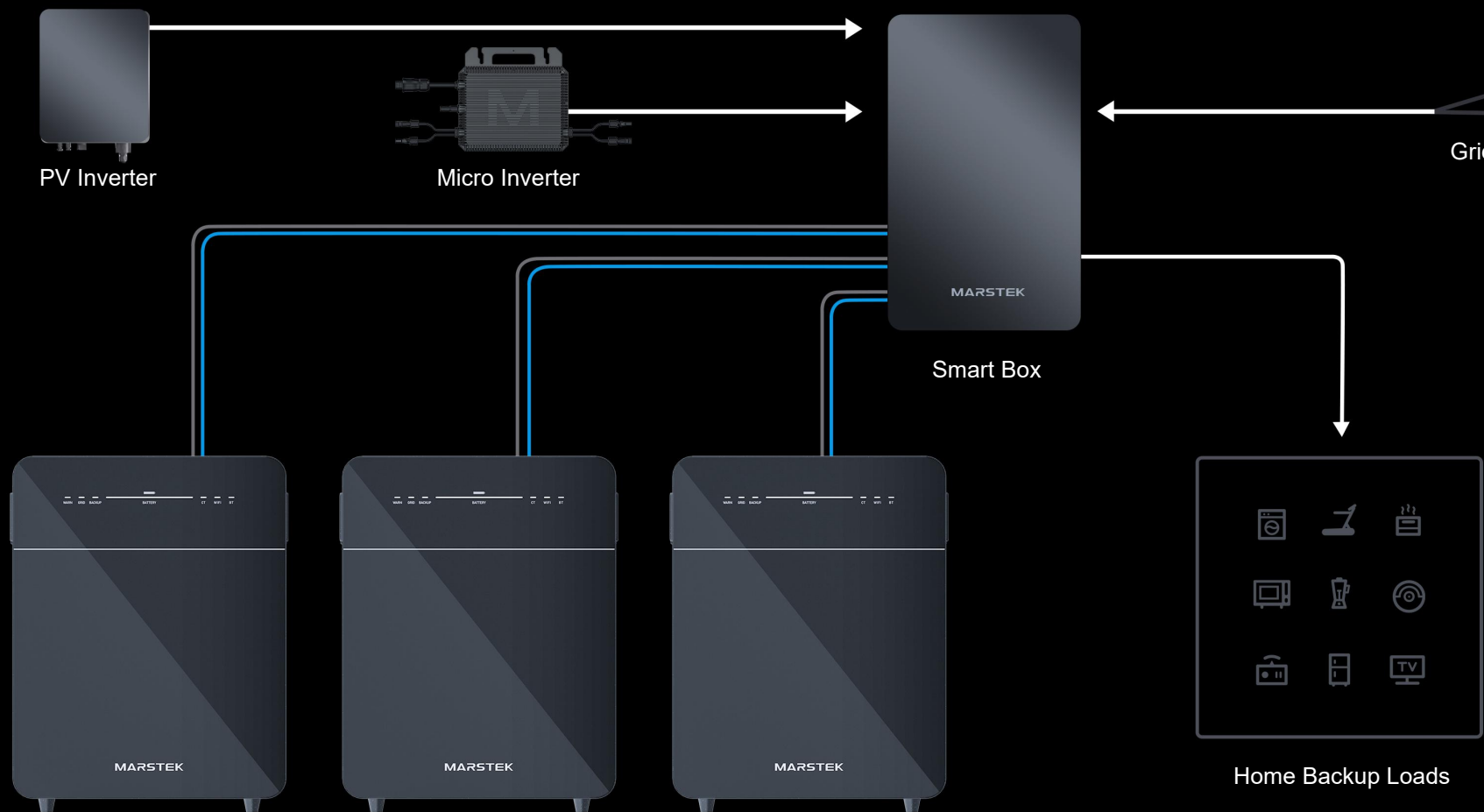
Max. Output

$$2.5\text{kW} \times 3 = 7.5\text{kW}$$

Max. Capacity

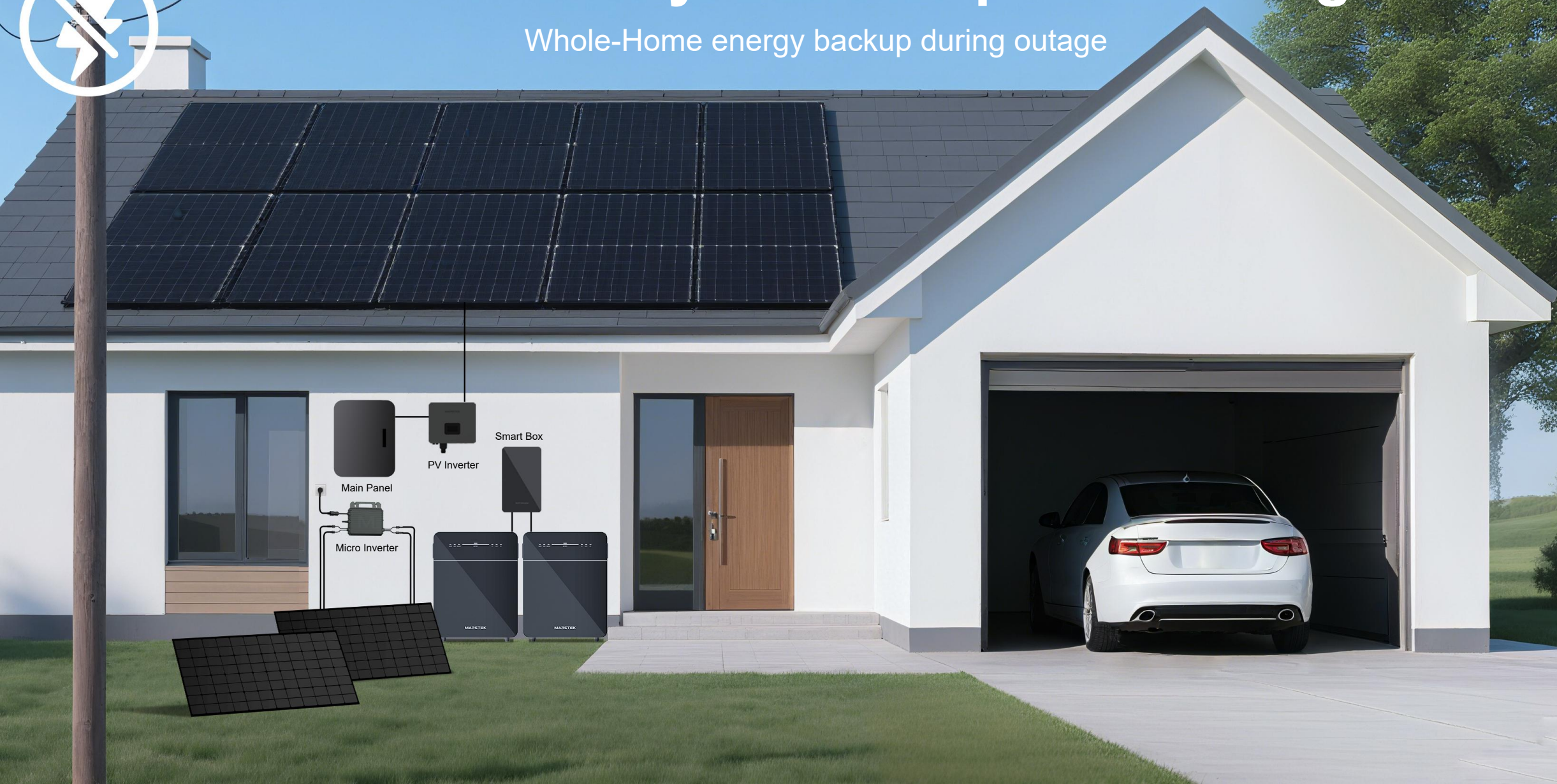
$$5.12\text{kWh} \times 3 = 15.36\text{kWh}$$

On-Grid Line
Backup Line



On-Grid PV System Keep Generating

Whole-Home energy backup during outage



Reliable and Long-Lasting Battery

Auto-Class

LFP Storage Battery

6000+

Life Cycles

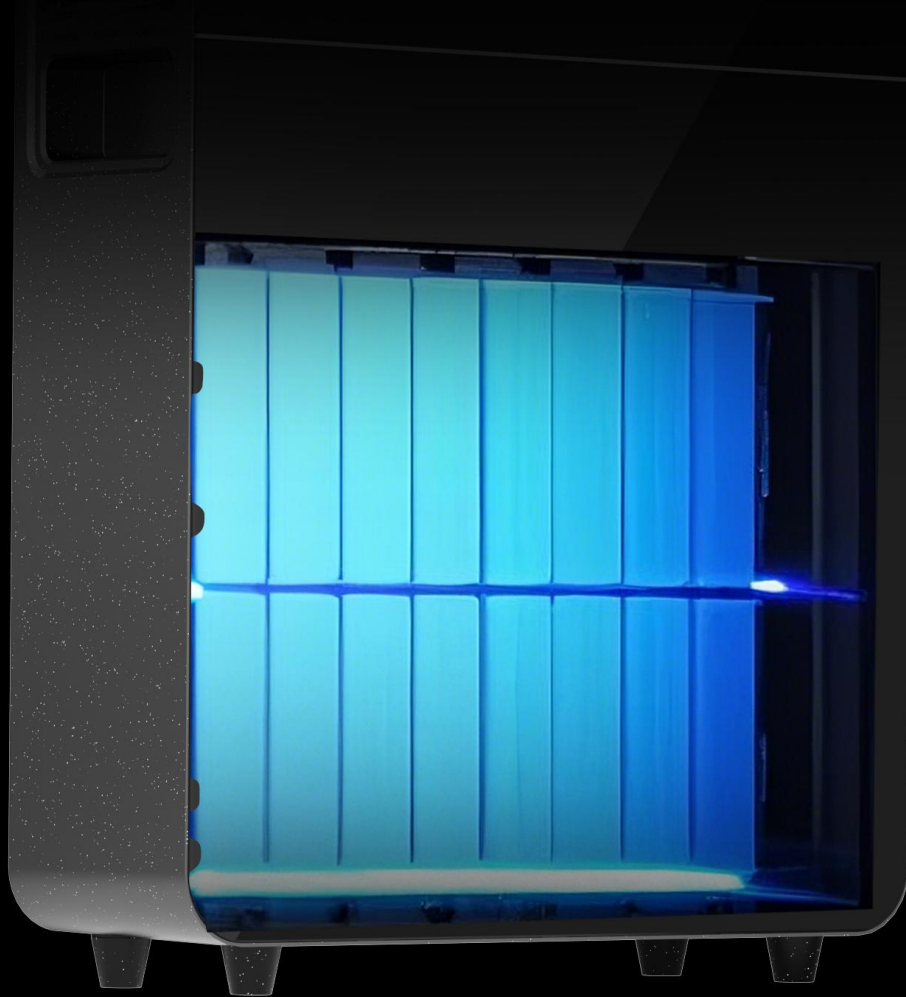
15

Years Lifespan

Intelligent BMS

6

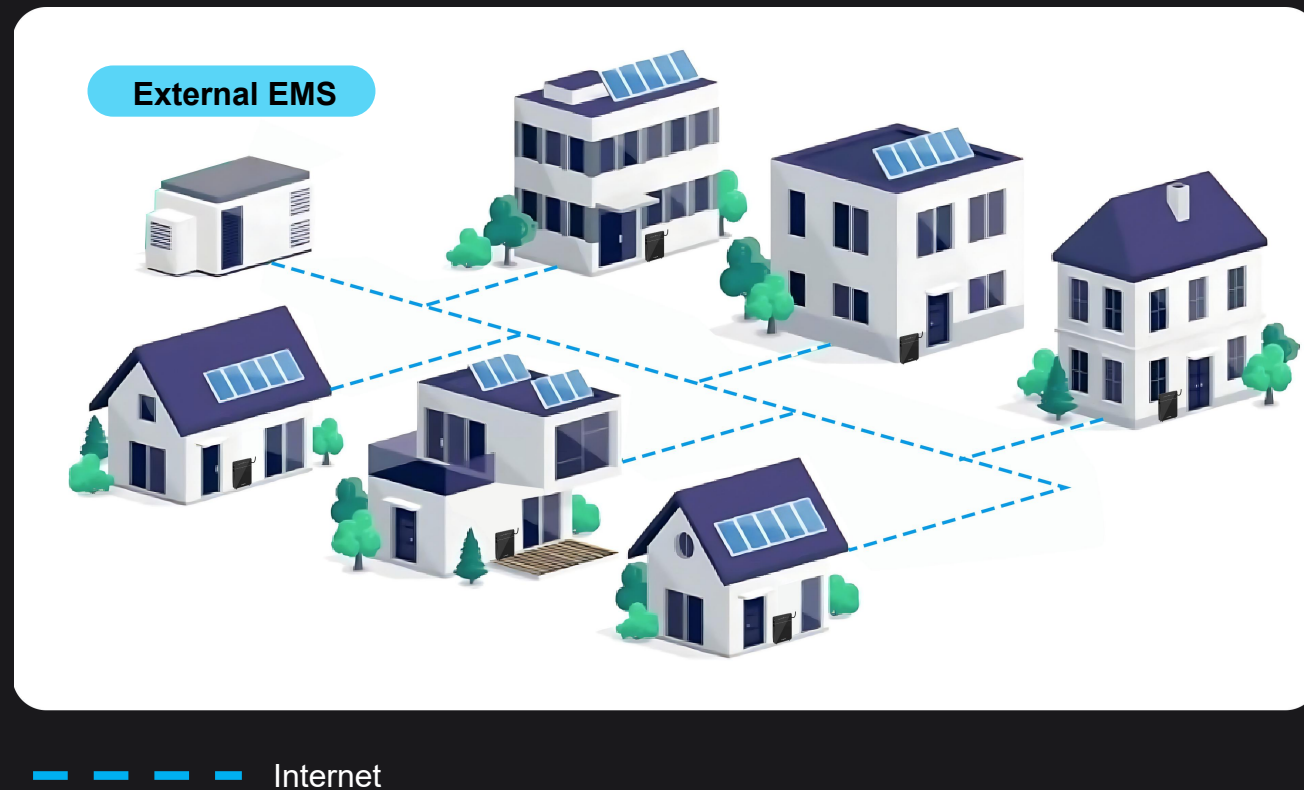
Protection



Seamless Integration with External EMS

Open API / Modbus Protocol

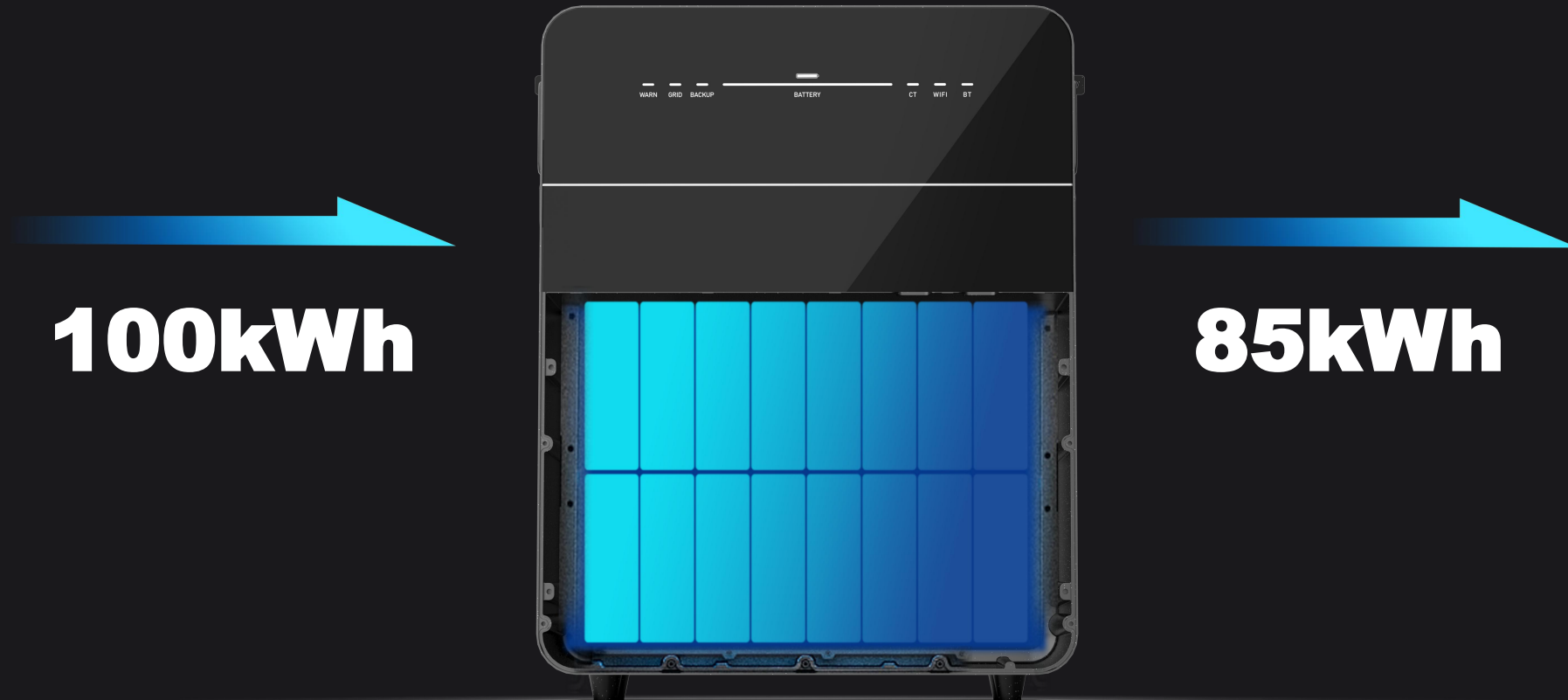
Integrated with LAN / RS485 / Wi-Fi / Bluetooth



85% Round-Trip Efficiency

Where Less Energy Waste = More Profit

DoD > 90% | Battery-AC Efficiency > 93.5%

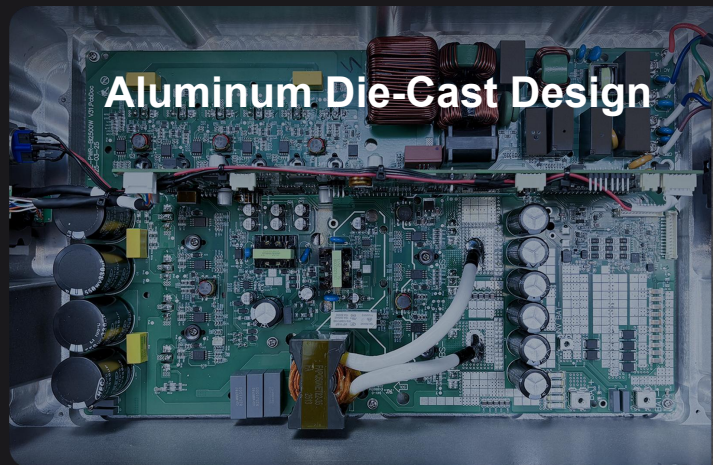


Note: The data provided above is for reference only. Please refer to the actual figures for accuracy.

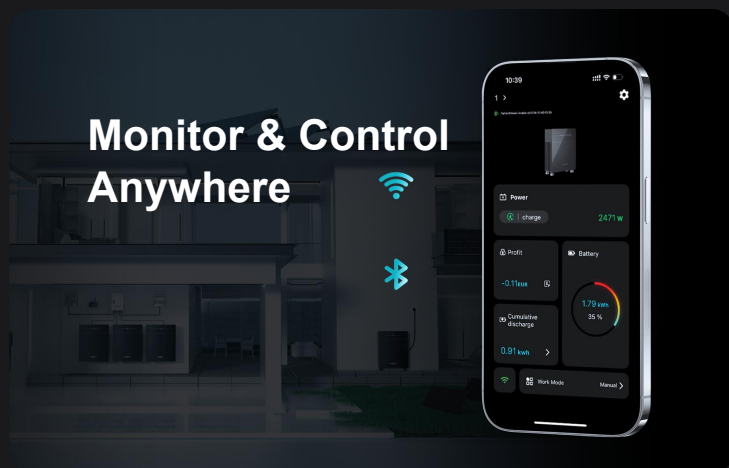
IP65 Waterproof



Aluminum Die-Cast Design



**Monitor & Control
Anywhere**



**-20°C to 60°C
Wide Temperature Range**



Full Mirror Panel



10
years

Warranty

-20°C to 60°C

Reliable Power from

Whole-Home
Backup

With MARSTEK Smart Box



2.5kW
Backup

Peak at 3.5kW



Plug & Play Installation in Just
5 Minutes



IP65

Waterproof & Dustproof



Compatible with Any
Existing Solar System



MARSTEK VENUS E 3.0

2.5kW Bidirectional & Backup
5.12kWh | Plug-in AC Battery



Dual RJ45 ports for
RS485 & Ethernet



2.5kW

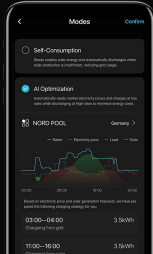
Bidirectional Power



EPS Switchover in 15ms



MARSTEK
Intelligence



Anti Feed-in

With Smart Meter

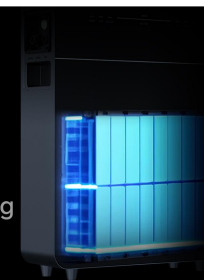


Sub-30dB

Silent Operation

6000+
Cycles

Long-Lasting
LFP Cells



Annual Savings Up To
€1,310



THANKS!

Contact Us

Mail: info@marstekenergy.com

Web: marstekenergy.com



Facebook



Youtube