

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



AI Optimization Mode

Maximize Lower Bill

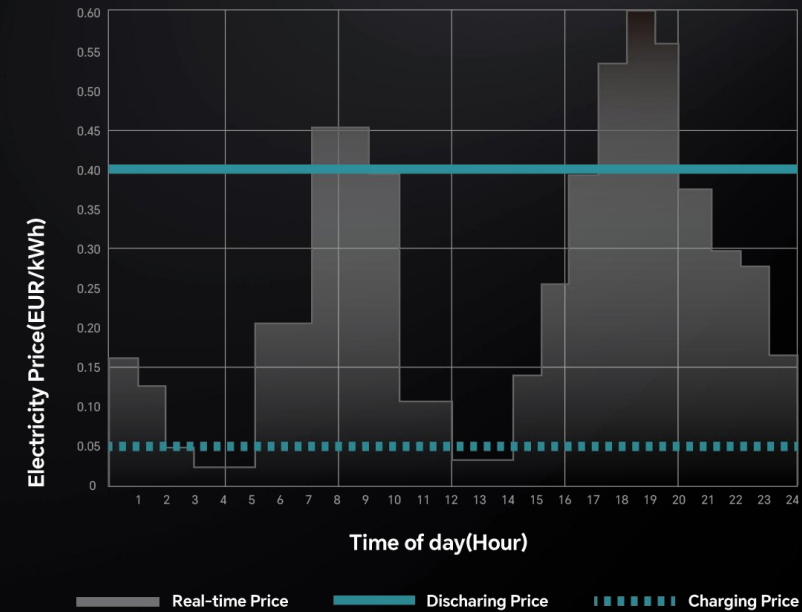
For residential users, Marstek Venus utilizes AI models to perform comprehensive big-data analysis of the entire home energy system status, real-time electricity pricing, and load patterns, then calculate the dynamic charging / discharging strategy for the maximize saving.



Manual Mode

Profit From TOU

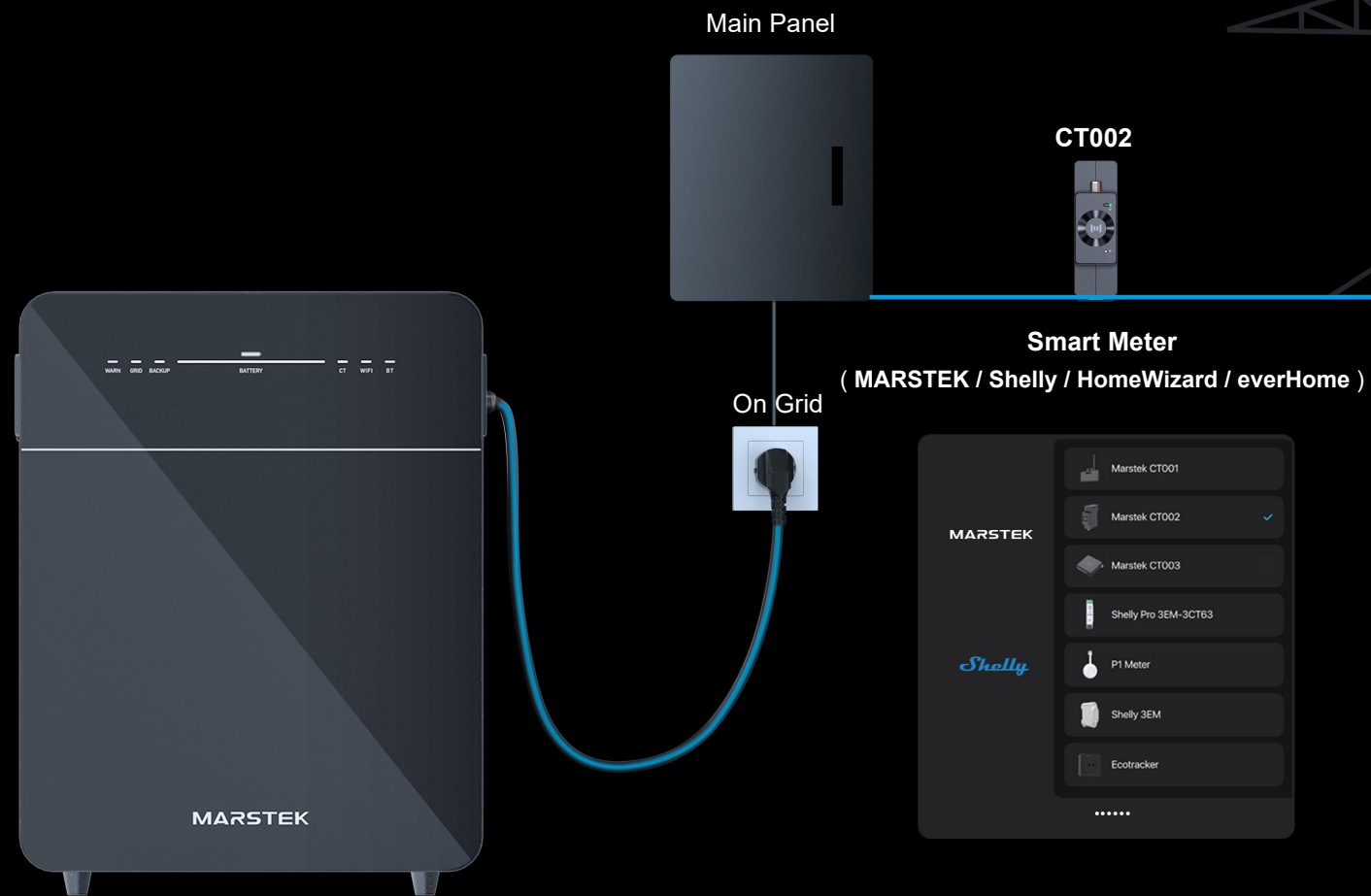
For enterprise users, manually configure charging / discharging periods and power based on time-of-use pricing(TOU) agreed with grid operators, enables the maximum profit.



Anti Feed-in

100%

Self-Consumption

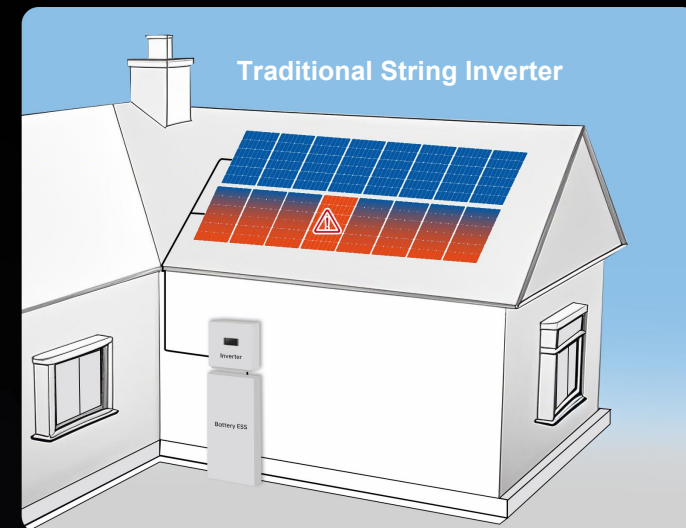
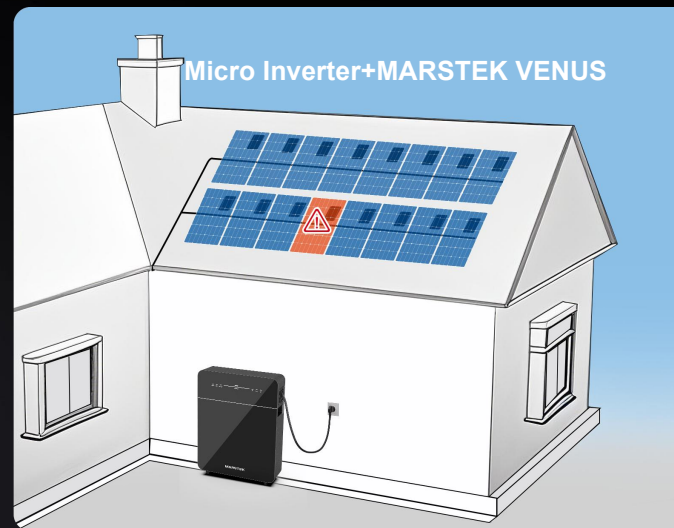


Flexible & Efficient Distributed ESS

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

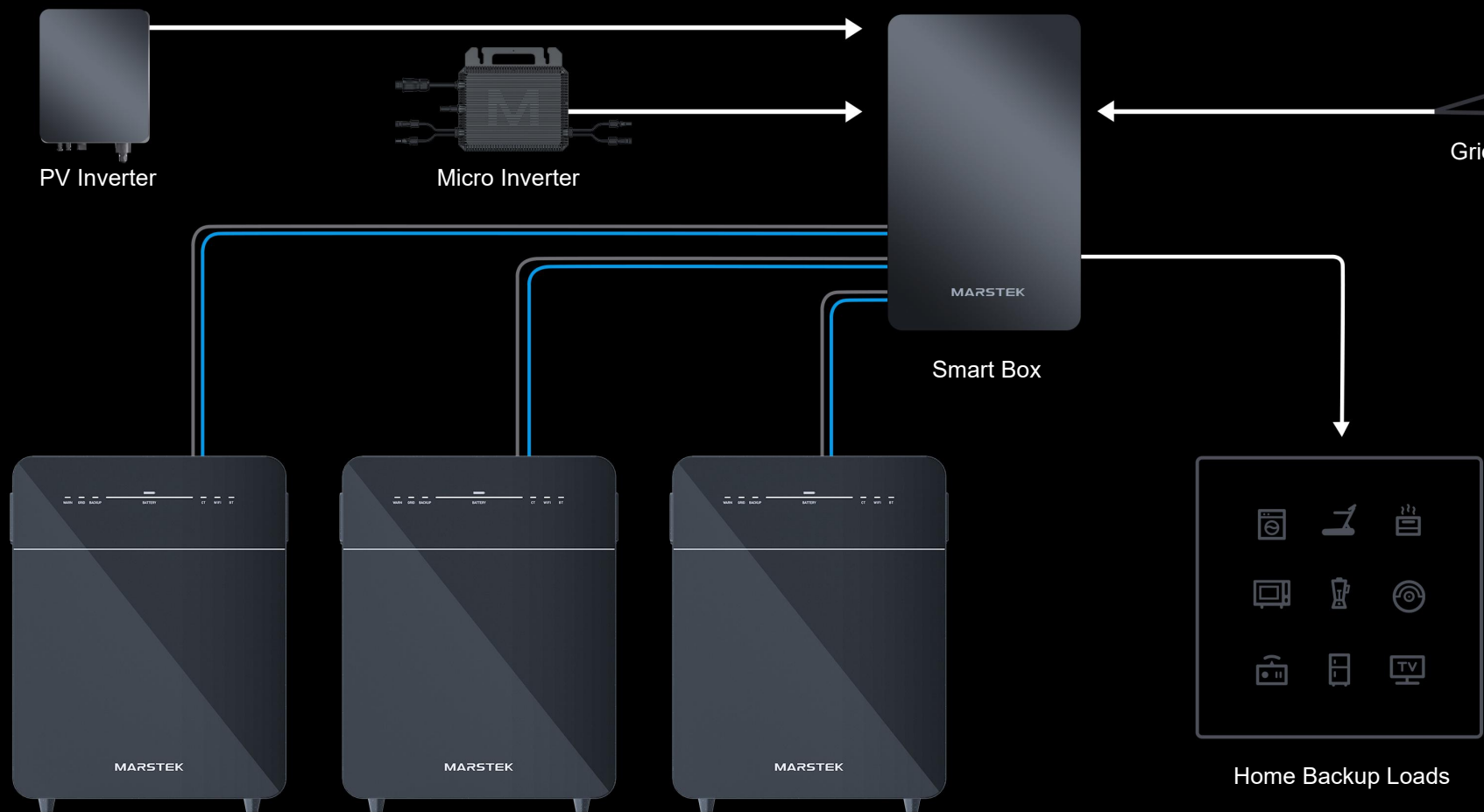
Max. Output

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

Max. Capacity

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

On-Grid Line
Backup Line



Three-Phase Backup ESS

Up to 3 units in parallel for every single-phase grid

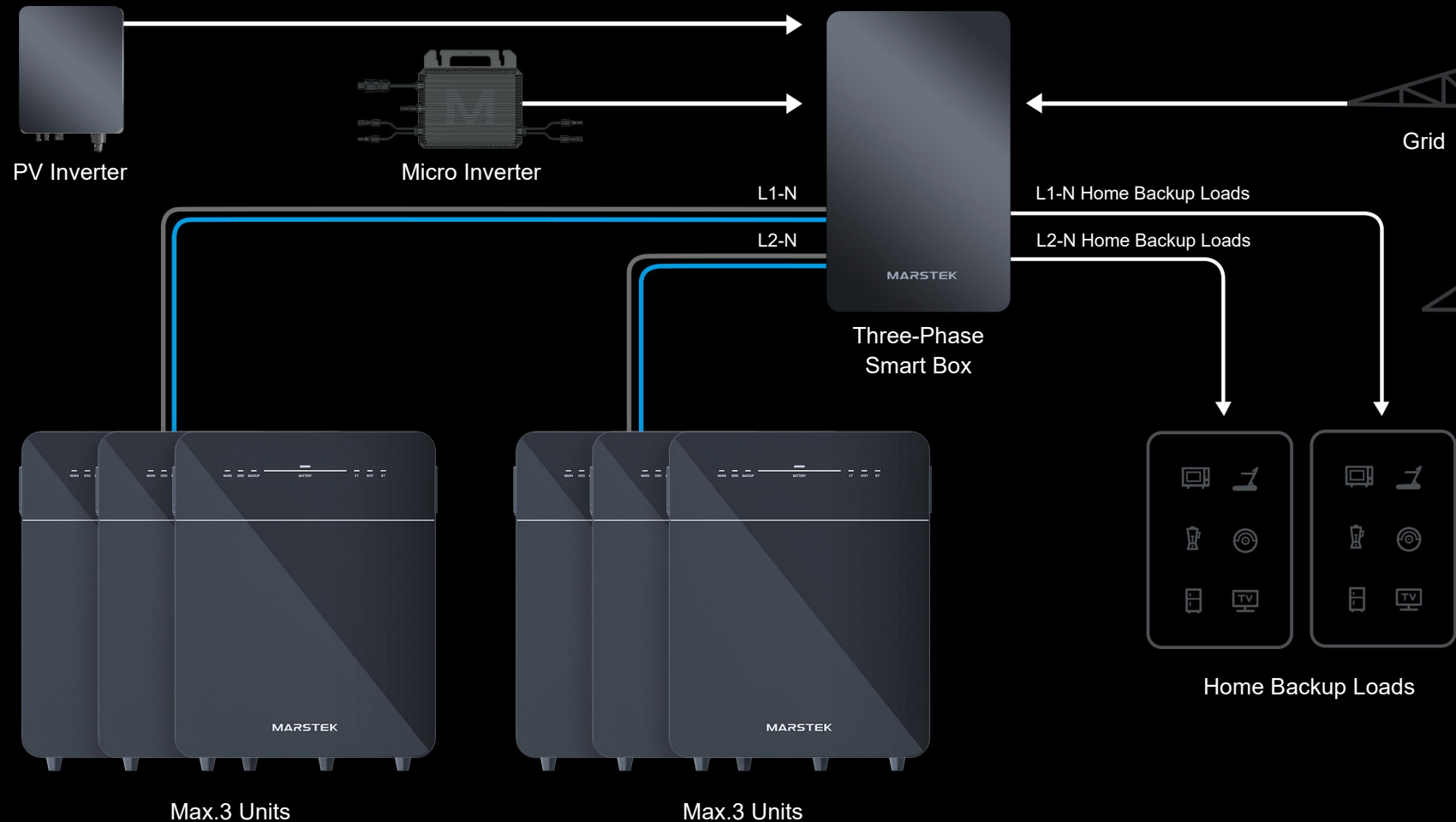
Max. Output

$$2.5\text{kW} \times 9 = 22.5\text{kW}$$

Max. Capacity

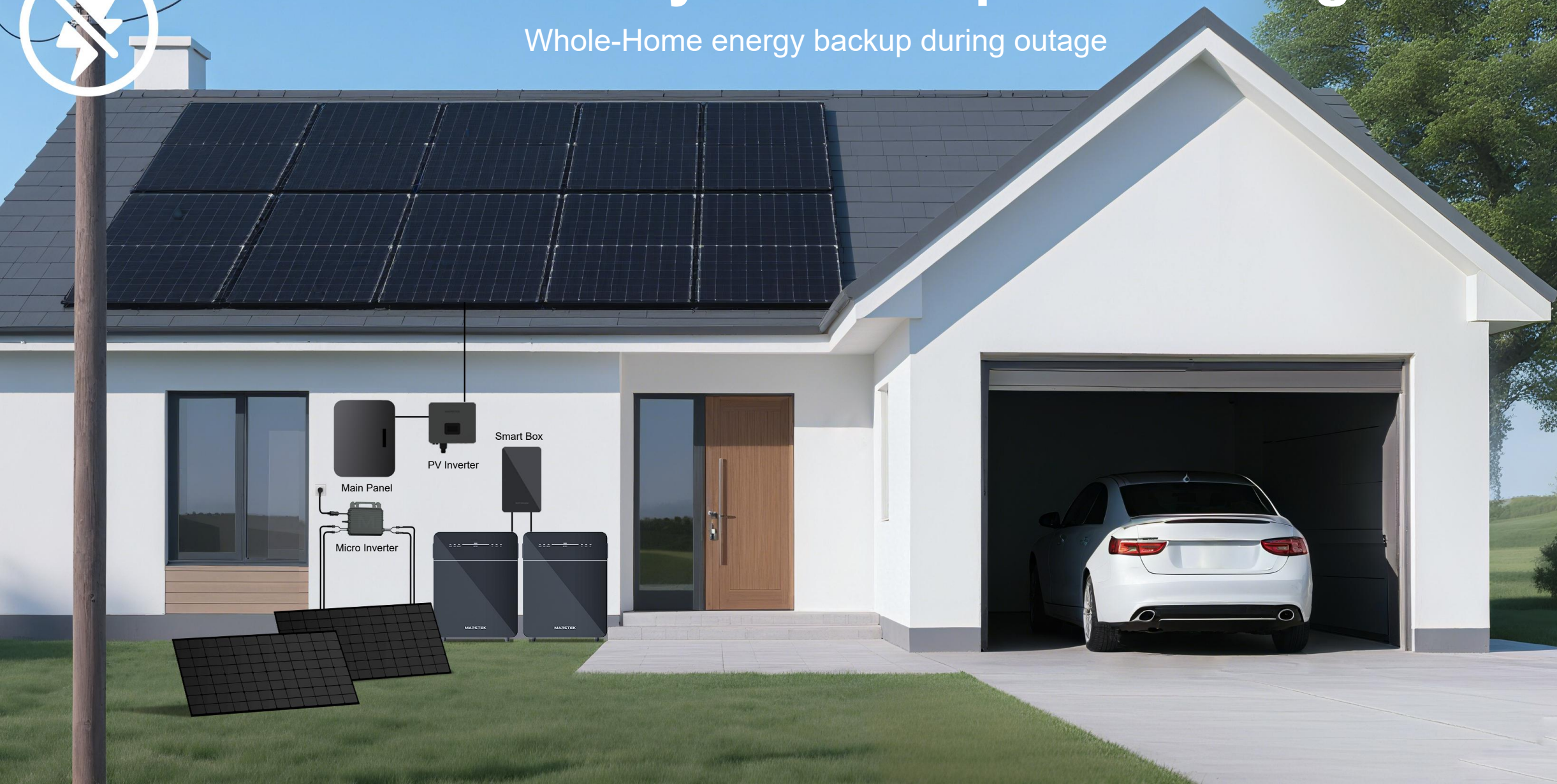
$$5.12\text{kWh} \times 9 = 46.08\text{kWh}$$

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

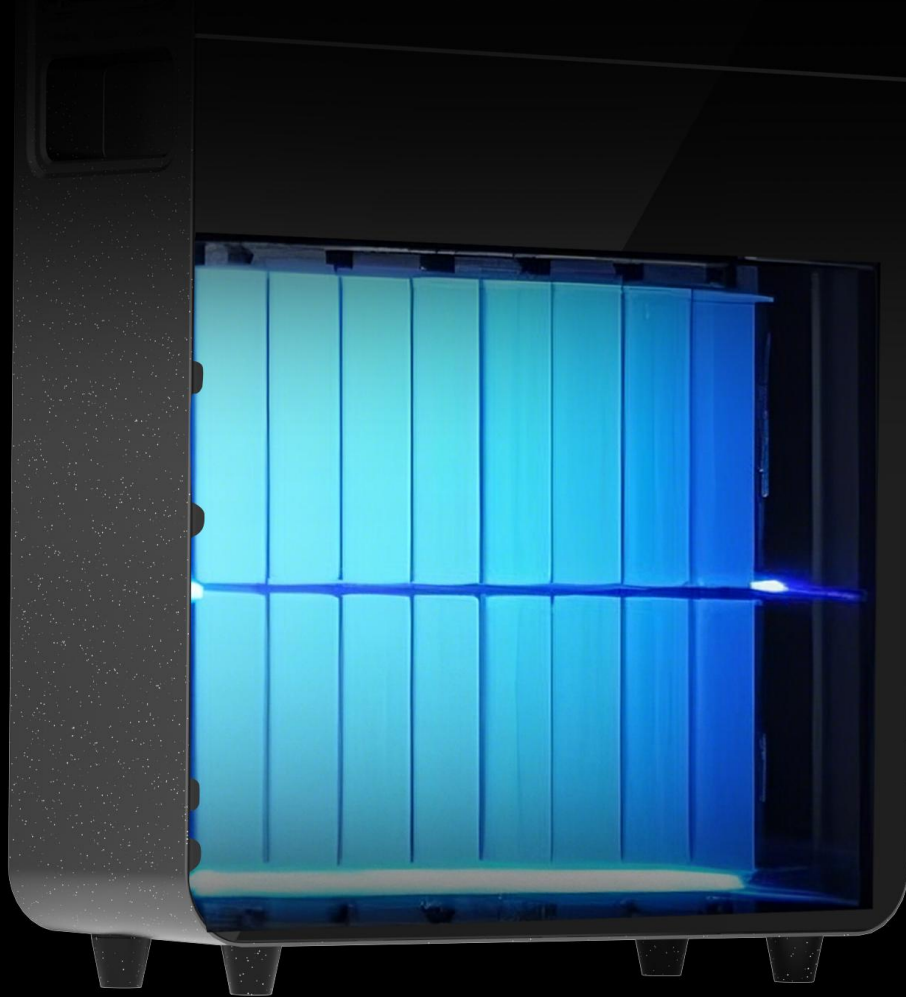
15

Years Lifespan

Intelligent BMS

6

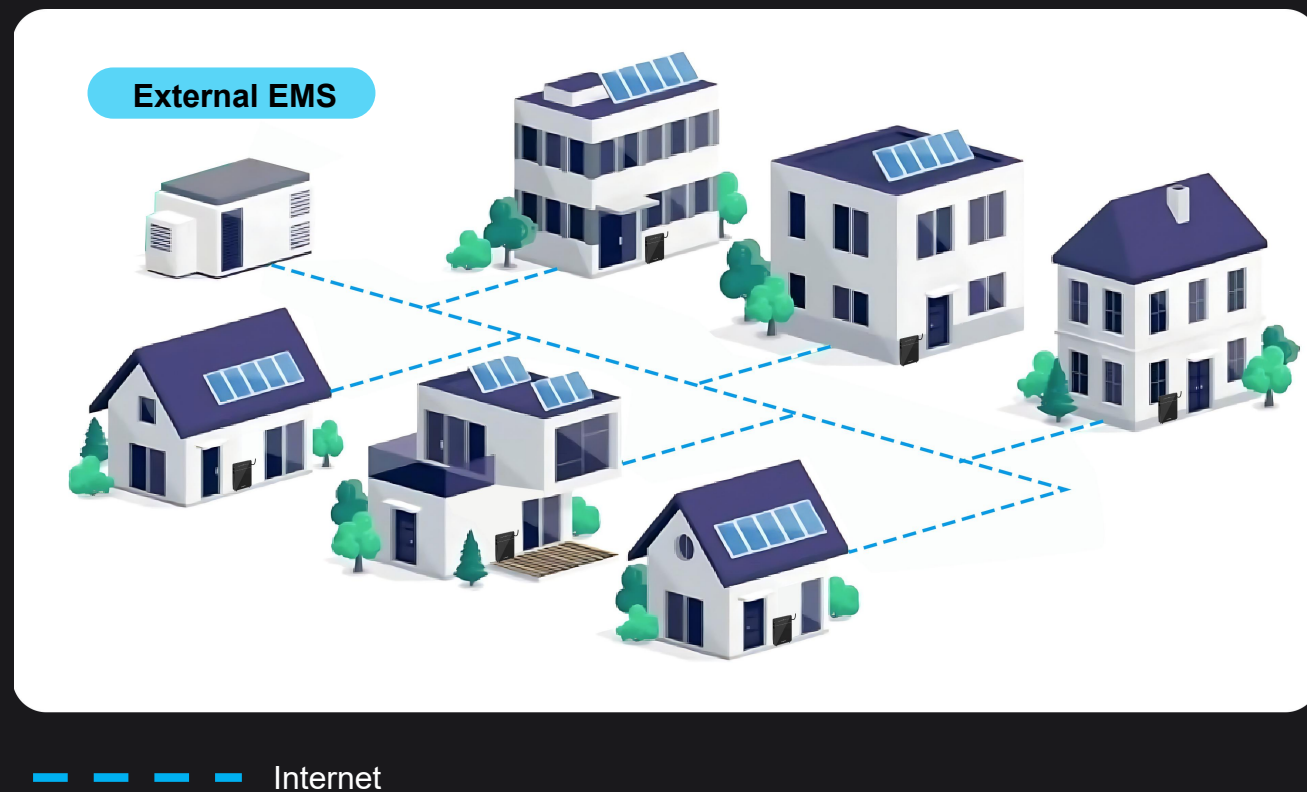
Protection



Seamless Integration with External EMS

Open API / Modbus Protocol

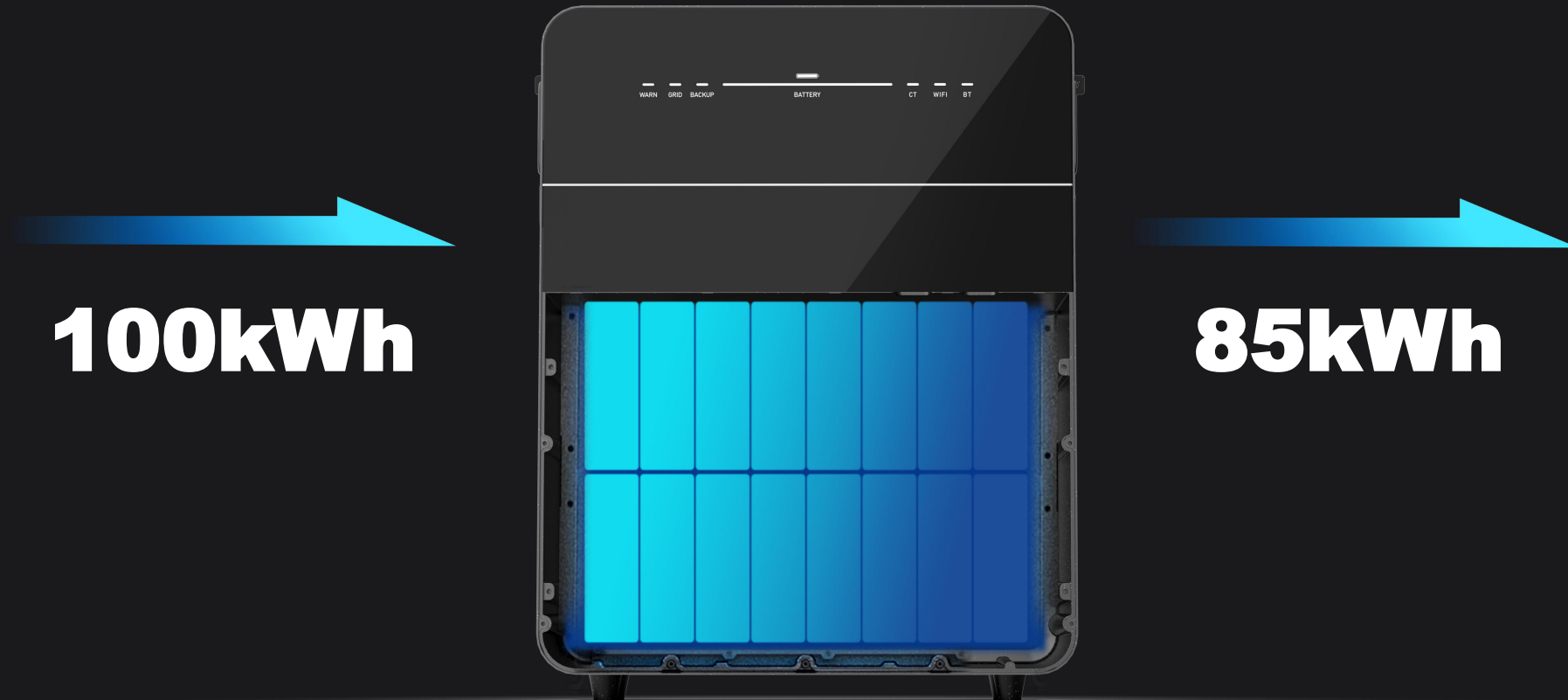
Integrated with LAN / RS485 / Wi-Fi / Bluetooth



85% Round-Trip Efficiency

Where Less Energy Waste = More Profit

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

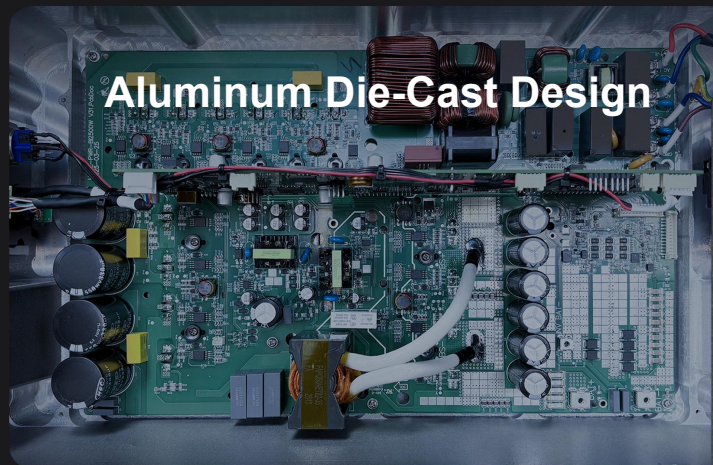


Note: The data provided above is for reference only. Please refer to the actual figures for accuracy.

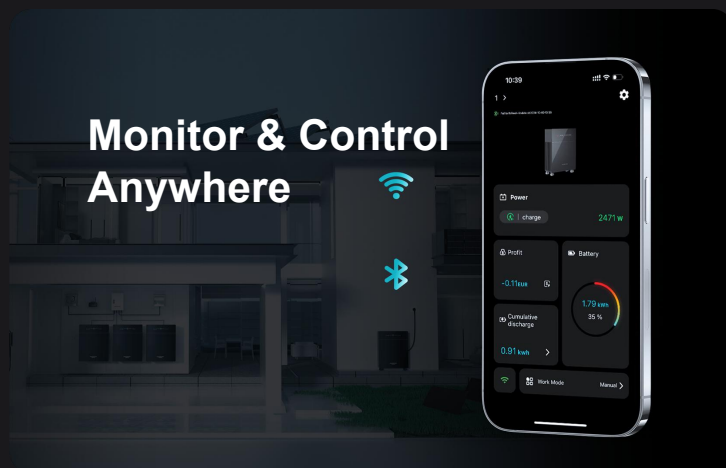
IP65 Waterproof



Aluminum Die-Cast Design



**Monitor & Control
Anywhere**



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



Full Mirror Panel



10
Years

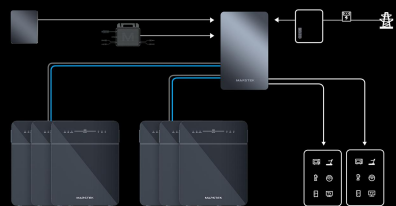
Warranty

-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

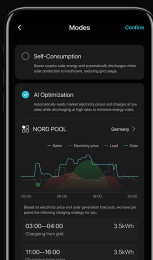
Bidirectional Power



EPS Switchover in 15ms



MARSTEK
Intelligence



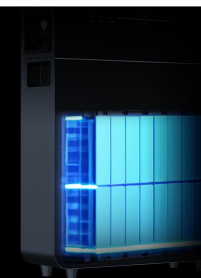
Anti Feed-in

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