

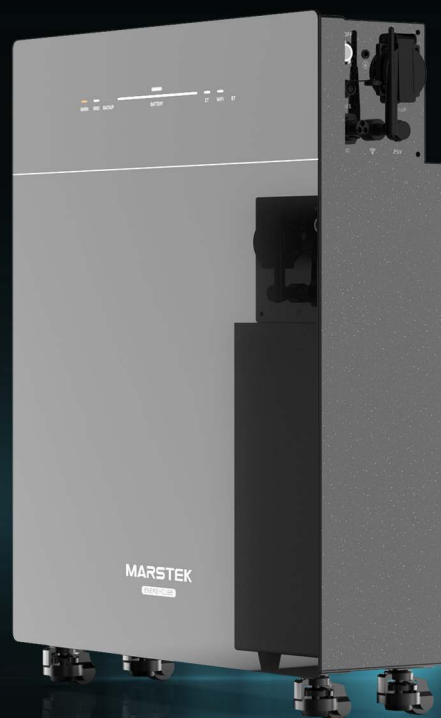
# MARSTEK

Power Anywhere & Anytime

## Next-gen Home Microgrid

# ENERGYCUBE AC COUPLE ESS

Store energy from solar, grid and generator





## Plug & Play

Charging and discharging by one cable

**2.5kW**

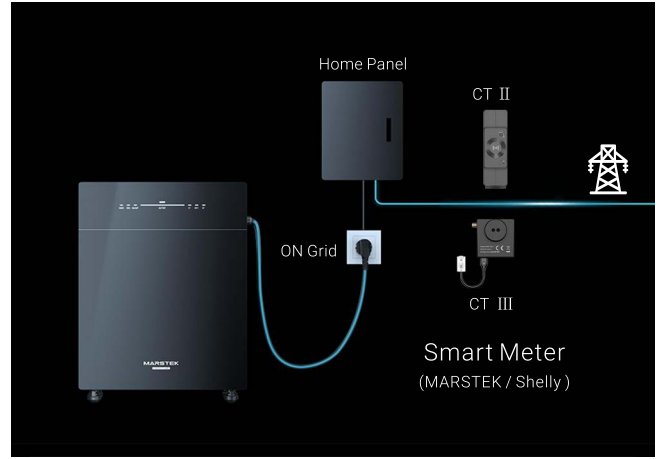
Input

**800W / 2.5kW**

Output

**2.56kWh / 5.12kWh**

Capacity



## Anti Feed-in

Support Marstek or Shelly smart meter

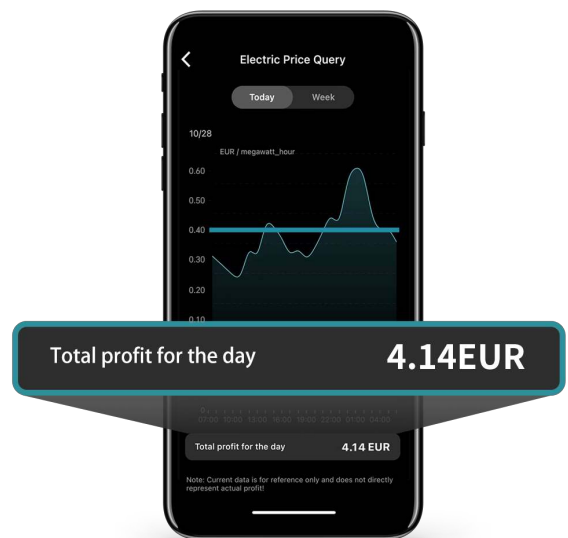
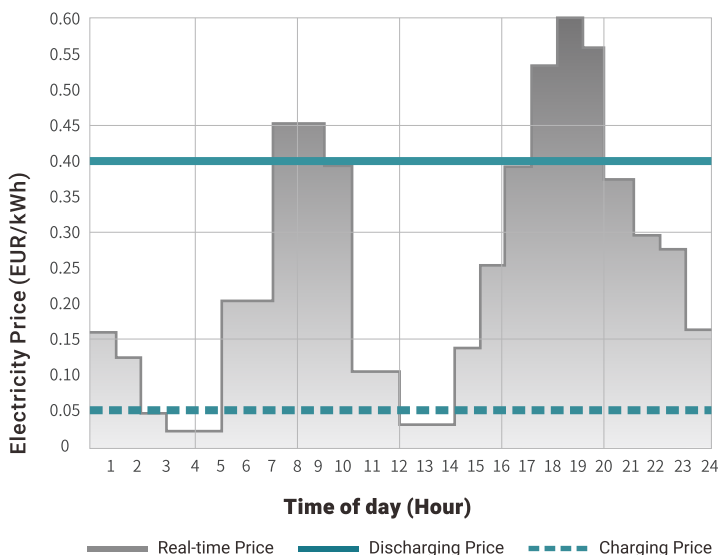
**100% Self-consumption**

Preventing energy from flowing into the grid



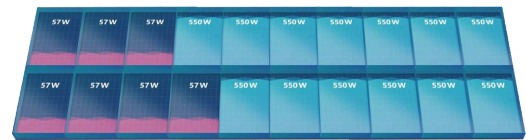
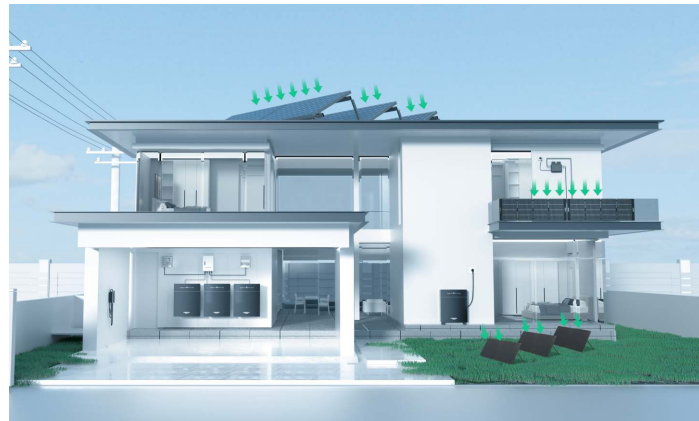
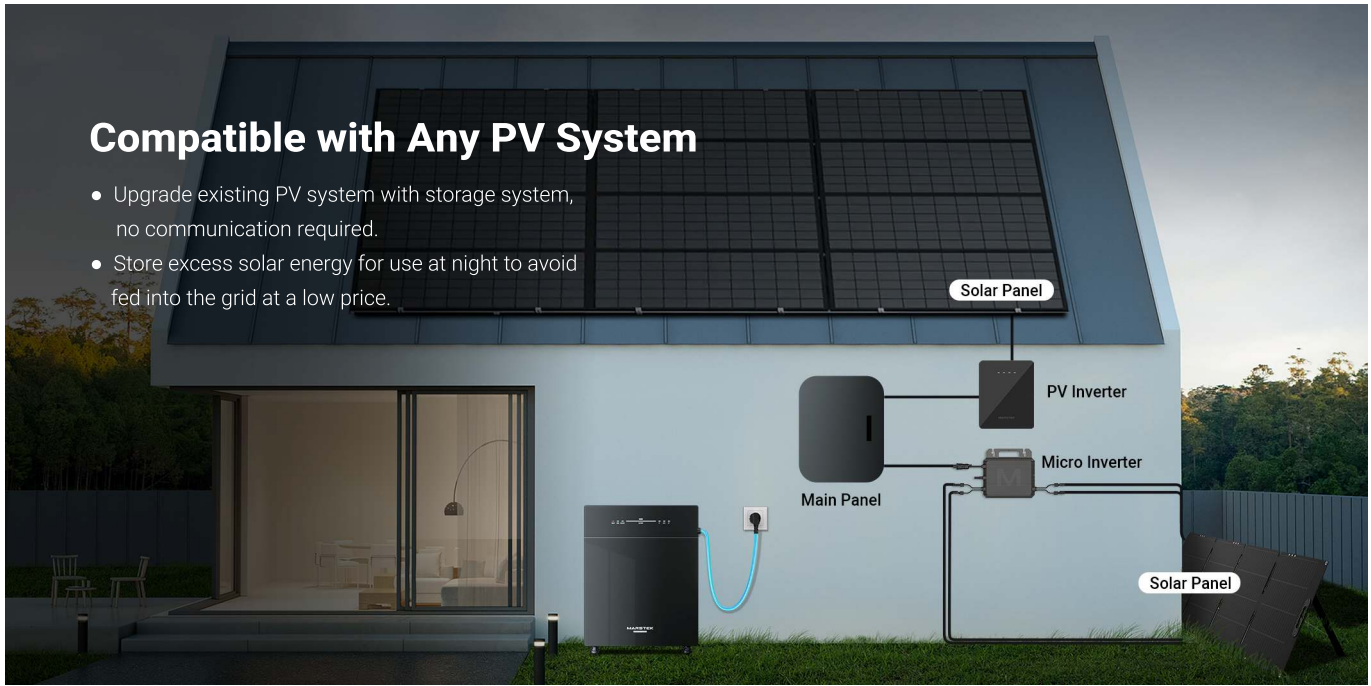
## Saving & Making Money

Real-time Electricity Price Monitoring in 46 Countries, Intelligent Peak Shaving and Valley Filling

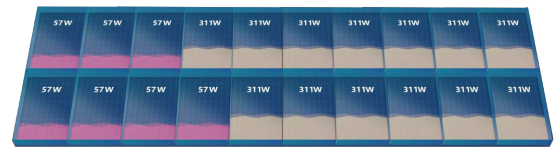


## Compatible with Any PV System

- Upgrade existing PV system with storage system, no communication required.
- Store excess solar energy for use at night to avoid fed into the grid at a low price.



Micro Inverter+Energycube



Traditional String Inverter

## Efficient Distributed Energy Storage

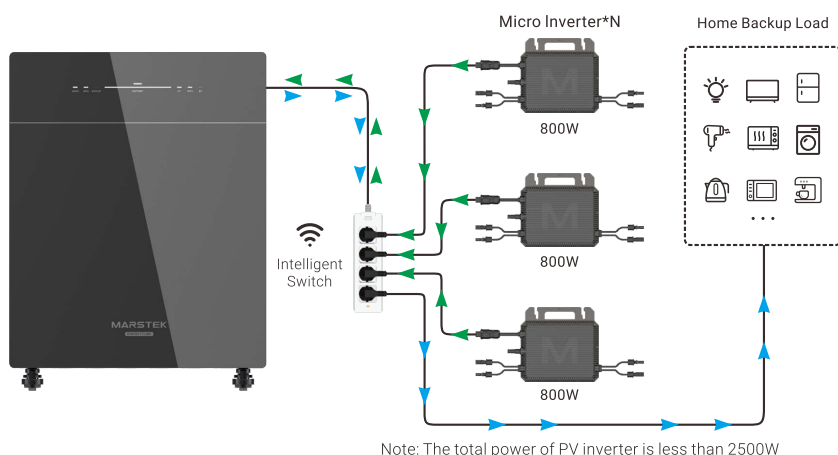
Install micro PV systems on balconies, rooftops, courtyards, etc., and store extra power into Energycube through the home grid. Easier to build, expand and maintain, More stable and reliable.

**60%↑** Higher efficiency than string PV systems

When any solar panel fails, the impact on the distributed PV storage system is very small.

## Simplest Micro Powerplant

Applied in summer house, yacht, RV, etc.



# Backup Essential Loads

Built-in backup output. Auto-switchover 10ms

**2.5kW**

Max. Output



## Single-phase Backup ESS

Up to 4 units in parallel for every single-phase grid

**2.5\*4 = 10kW**

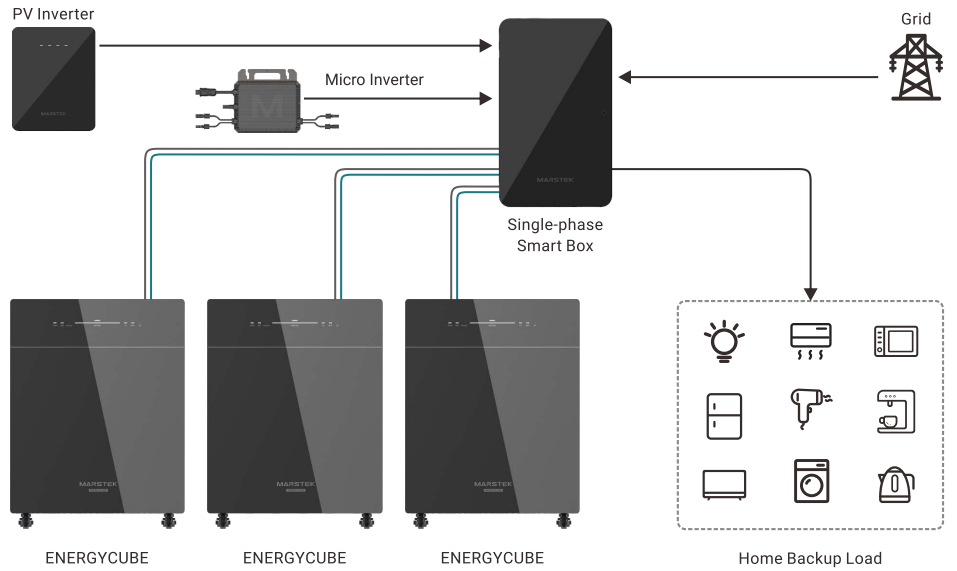
Max. Output

**2.56kWh\*4 = 10.24kWh**

**5.12kWh\*4 = 20.48kWh**

Max. Capacity

- On-grid Line
- Backup Line



## Three-phase Backup ESS

**2.5\*12 = 30kW**

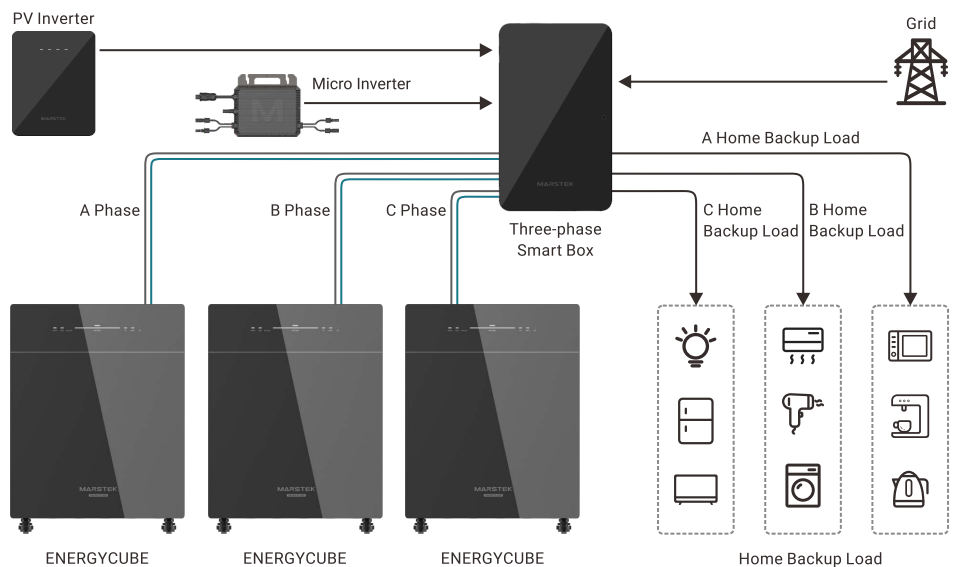
Max. Output

**2.56kWh\*12 = 30.72kWh**

**5.12kWh\*12 = 61.44kWh**

Max. Capacity

- On-grid Line
- Backup Line





## Reliable and Long-lasting Battery

ESS-Class LFP Storage Battery



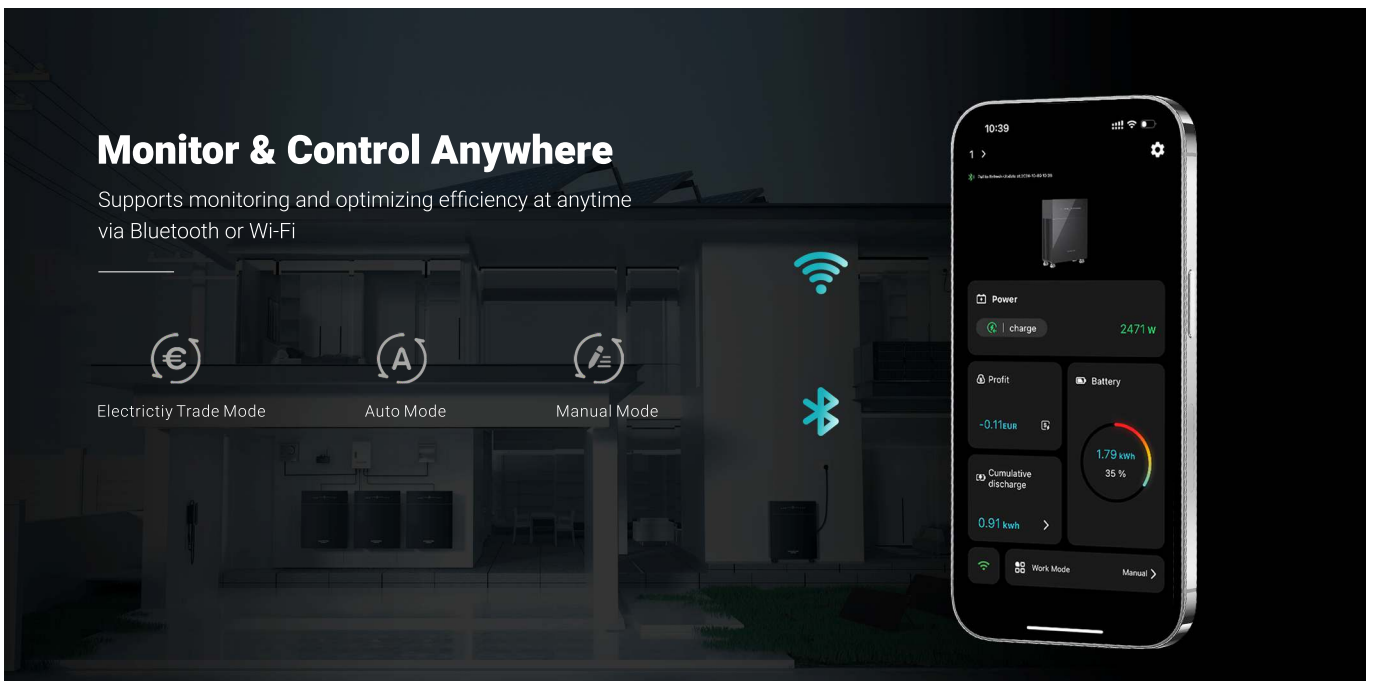
## Intelligent BMS



## IP65 Waterproof



## Wide Temperature Range



## Monitor & Control Anywhere

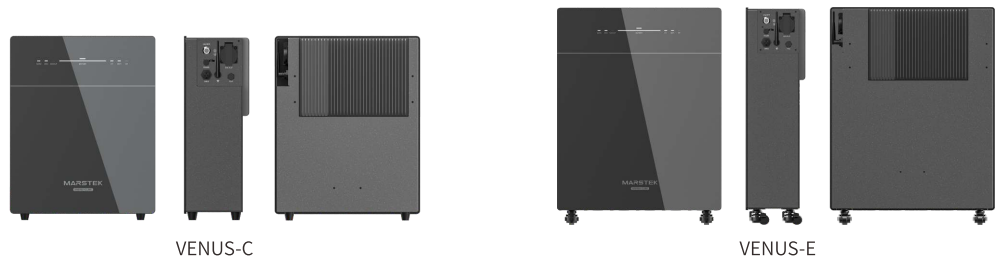
Supports monitoring and optimizing efficiency at anytime via Bluetooth or Wi-Fi

€  
Electricity Trade Mode

A  
Auto Mode

✎  
Manual Mode

# SPECIFICATIONS



Model	VENUS-C	VENUS-E
<b>Battery Info</b>		
Rated Voltage	51.2V (16S)	
Capacity	2560Wh	5120Wh
Life Cycle (Times)	>6000 (25°C)	
Battery Type	LiFePO <sub>4</sub>	
DoD	90%	
<b>AC Input / Output (On Grid)</b>		
Rated Input Power	2.5kVA	
Rated Output Power	2.5kVA / 800VA	
Operating Phase	L / N / PE	
Rated Grid Voltage	230V	
Grid Voltage Range	187V ~ 253V	
Rated Grid Frequency	50Hz	
Rated Grid Output Current	10.9A	
Power Factor	> 0.99 (Default) / 0.8 leading...0.8 lagging (Adjustable)	
THDi	< 3%	
<b>Back-up (Off Grid)</b>		
Rated Output Power	2.5kVA	
Max. Apparent Output Power	3.5kVA, 10s	
Rated Grid Voltage	230V	
Rated Output Current	10.9A	
Rated Output Voltage Frequency	50Hz	
THDu(Linear Load)	<3%	
<b>Efficiency</b>		
Battery-AC Side Max. Efficiency	> 93.5%	
<b>Protection</b>		
Protection Level	I	
Overvoltage/Voltage Withstand Level	DC II / AC III	
<b>General</b>		
Isolation Type	Isolated	
Operating Temperature Range	-20°C ~ + 55°C(Storage -30°C ~ + 85°C)	
Relative Humidity	0 ~ 95%	
Ingress Protection	IP65	
Cooling Strategy	Natural Convection	
Max. Operating Altitude	2000m	
On-grid Connection Standard	VDE 4105/0124,TOR R25,NF EN50549-1,UNE217001/217002,NTS 631,CE10-21,PETREE,PN-EN 50549-1/-2,G98, AS4777.2	
Regulatory/EMC	IEC62040,IEC62477,IEC/EN 61000-6-1/-2/-3/-4,IEC/EN 61000-3-2/-3,EN 300 328,EN 301 489 -1/-17, EN 50665,CB 62619	
Dimension	450*550*200mm	560*690*201mm
Weight	45 ± 0.5kg	60 ± 0.5kg
<b>Additional Data</b>		
On-grid AC Connection	Three-wire Household Plug (Euro16A)	
Back-up Connection	Three-hole socket (Euro socket)	
Display	LED	
Supported Communication Interface	WIFI & RS485 (Waterproof aviation plug)	