

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

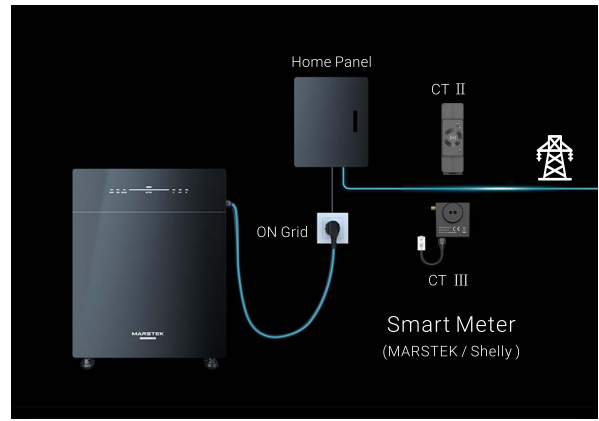
Input

800W / 2.5kW

Output

2.56kWh / 5.12kWh

Capacity



Anti Feed-in

Support Marstek or Shelly smart meter

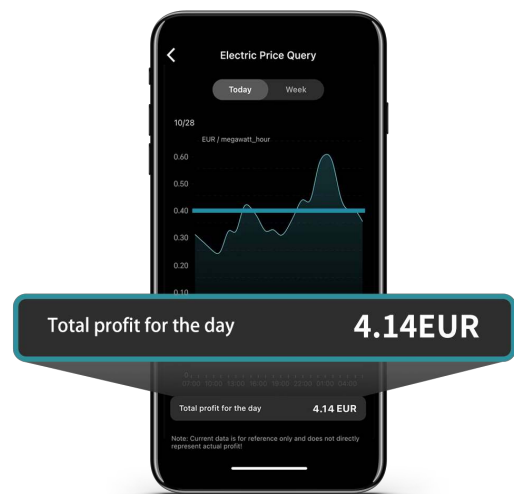
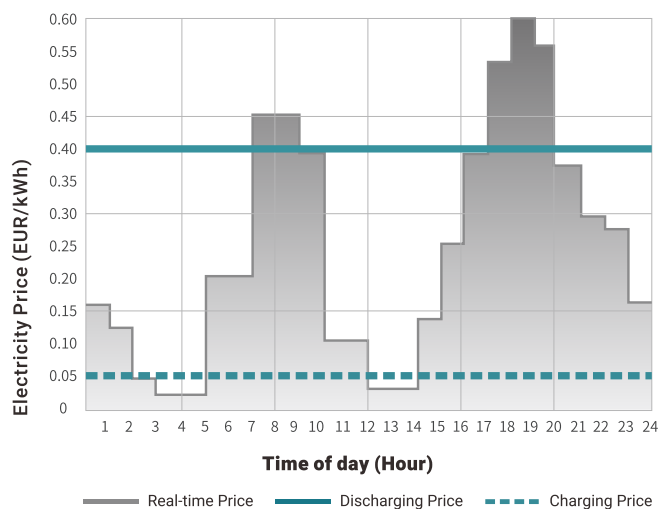
100% Self-consumption

Preventing energy from flowing into the grid



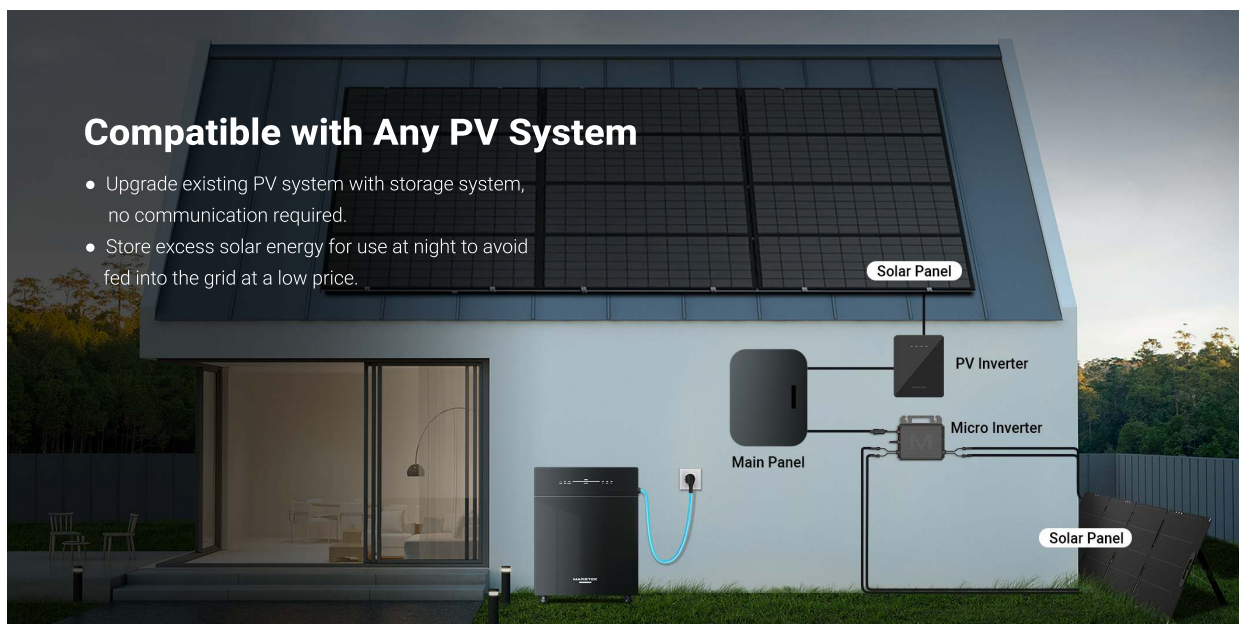
Saving & Making Money

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

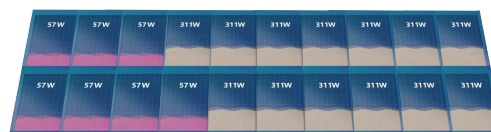


Compatible with Any PV System

- 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

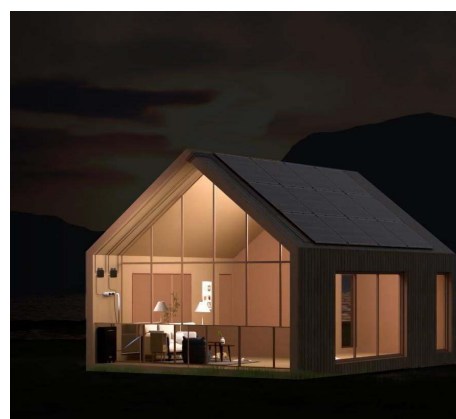
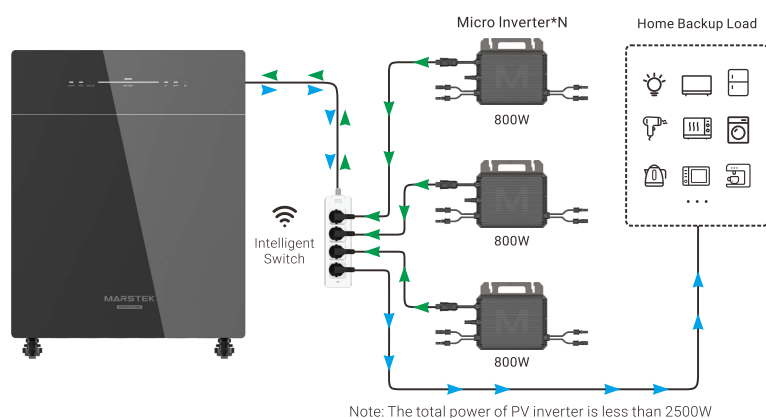
Install micro PV systems on balconies, rooftops, courtyards, etc., and store extra power into Energycube through the home grid. Easier to build, expand and maintain, More stable and reliable.

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

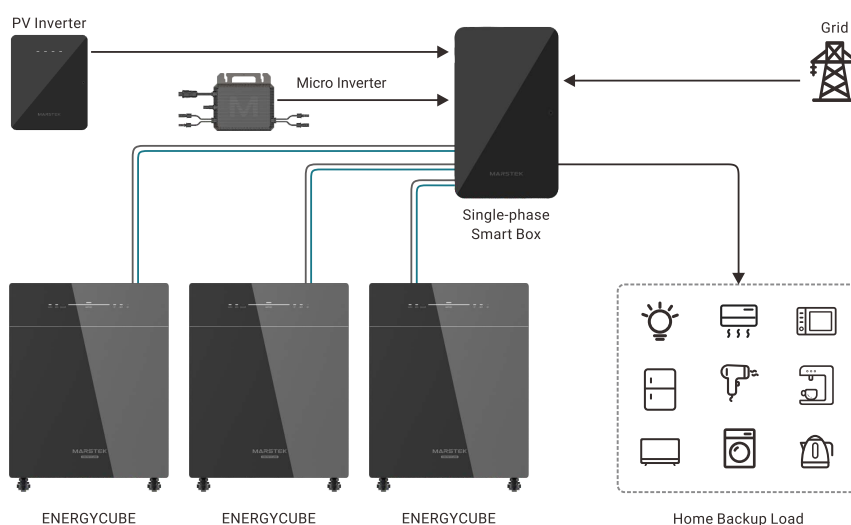
2.56kWh*4 = 10.24kWh

5.12kWh*4 = 20.48kWh

Max. Capacity

— On-grid Line

— Backup Line



Three-phase Backup ESS

2.5*12 = 30kW

Max. Output

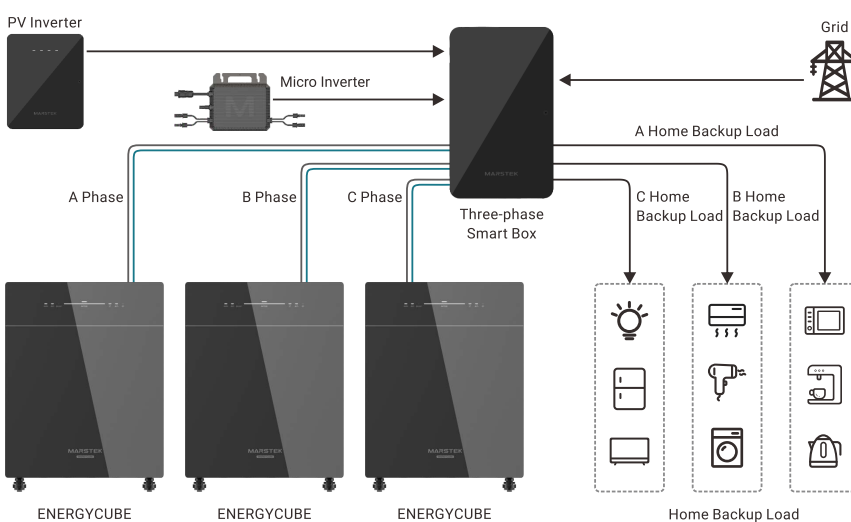
2.56kWh*12 = 30.72kWh

5.12kWh*12 = 61.44kWh

Max. Capacity

— On-grid Line

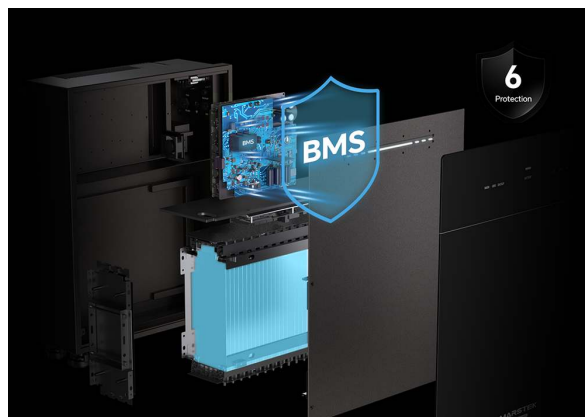
— Backup Line





Reliable and Long-lasting Battery

ESS-Class LFP Storage Battery



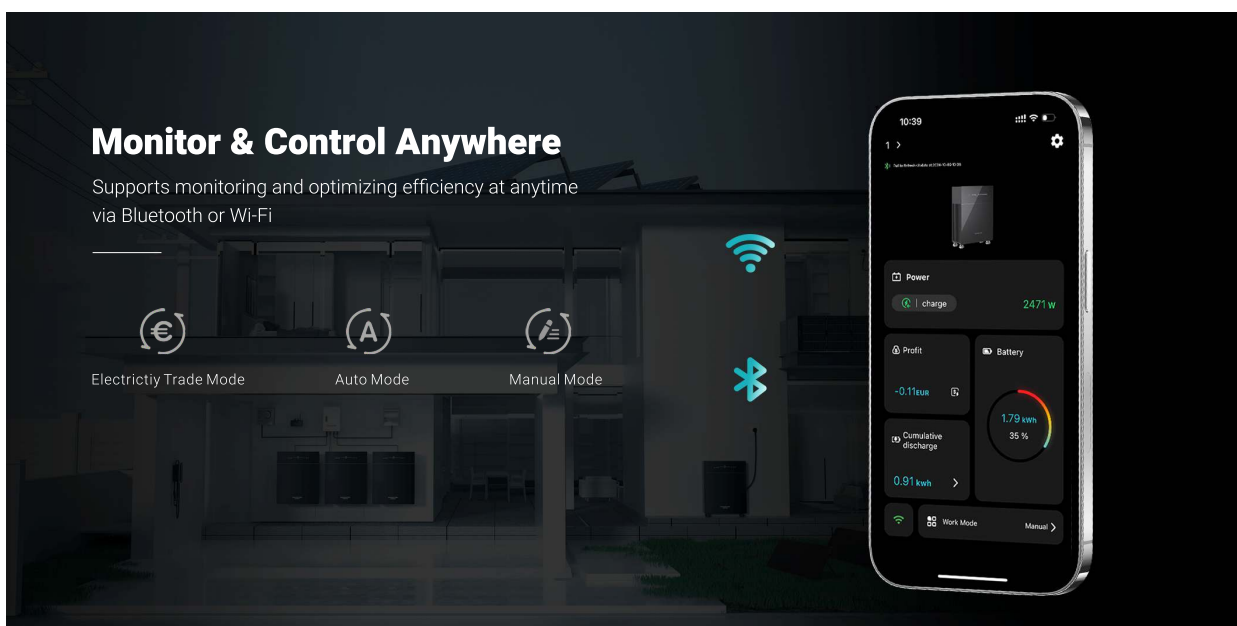
Intelligent BMS



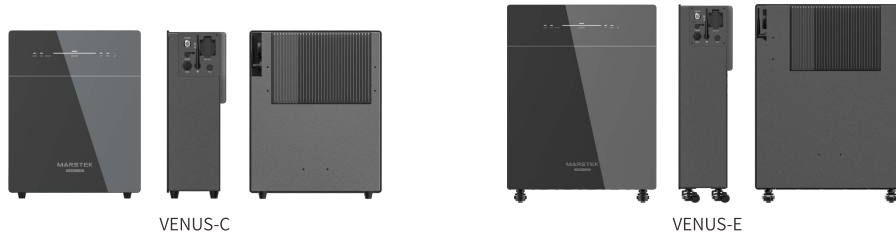
IP65 Waterproof



Wide Temperature Range



SPECIFICATIONS



Model	VENUS-C		VENUS-E	
Battery Info				
Rated Voltage	51.2V (16S)			
Capacity	2560Wh		5120Wh	
Life Cycle (Times)	>6000 (25°C)			
Battery Type	LiFePO ₄			
DoD	90%			
AC Input / Output (On Grid)				
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%			
Back-up (Off Grid)				
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%			
Efficiency				
Battery-AC Side Max. Efficiency	> 93.5%			
Protection				
Protection Level	I			
Overvoltage/Voltage Withstand Level	DC II / AC III			
General				
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	
Additional Data				
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)			