

MARSTEK VENUS A

All-in-One 2.4kW 4 MPPT Balcony ESS with 1.5kW AC-Coupling

AC-Coupled Energy Storage System

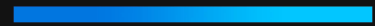
Plug & Play

1.5kW Bidirectional On-Grid Power

Max. 1.2kW Backup



Modular Design



2.12kWh

Per Battery Pack

12.72kWh

Flexible Expansion up to 5 Battery Packs



10
Years

Warranty

-20°C to 60°C

Reliable Power from

Whole-Home Backup

With MARSTEK SmartBox



1.2kW Backup

Peak at 1.44kW



Plug & Play
Installation in Just
5 Minutes



IP65

Waterproof & Dustproof



Compatible with Any Existing Solar System

Seamlessly Integrate
with Your Existing Solar Setup



MARSTEK VENUS A

Plug-and-Play | Max. 2.4kW PV Input | 4 MPPT



Max 2.4kW from PV
Max 1.5kW from Grid

1.5kW

Bidirectional Power



EPS Switchover in 15ms

AI Optimized

TOU Management
for Cost Savings



Anti Feed-in

With Smart Meter

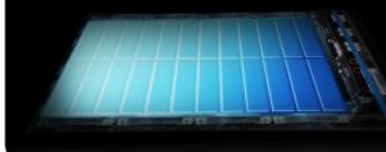


Sub-30dB

Silent Operation

6000+ Cycles

Long-Lasting LFP Cells



Modular Design

Up to 5 Units
12.48kWh

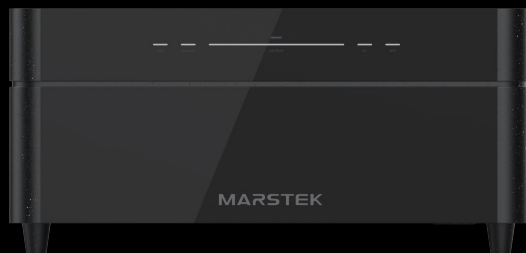


MARSTEK

Power Anywhere & Anytime

VENUS A

All-in-One 2.4kW 4 MPPT Balcony ES
with 1.5kW AC-Coupling



Specification Type		Host Specifications
		Model: Venus A
PV Input	Maximum Input Power	2400W Max
	MPPT Startup Voltage	22V
	Operating Voltage Range	16V ~ 60V
	Nominal Input Current (Single Channel)	16A
	Maximum Input Short-Circuit Current (Single Channel)	20A
	MPPT Track Number	4
	MPPT Efficiency	99.80%
On-Grid Input	Maximum Input Power	1500VA
	Nominal Grid Voltage	230V@50Hz
	Nominal Grid Output Current	6.53A
	Power Factor	> 0.99
	THDi	< 3%
On-Grid Output	Nominal Output Power	1500VA
	Nominal Grid Voltage	230V@50Hz
	Nominal Grid Output Voltage	3.48A / 6.53A
	Power Factor	> 0.99
	THDi	< 3%
Off-Grid Output	Nominal Output Power	1200VA
	Nominal Output Power	1440VA, 60s
	Nominal Output Current	5.22A
	Nominal Output Voltage	230V@50Hz
	THDu (Linear load)	< 3%
Battery Info	Nominal Voltage	41.6V (13S)
	Capacity	2.12kWh
	Cycle Life	> 6000 (25°C)
	Battery Chemistry	LiFePO4
	DoD (Depth of Discharge)	90%
Efficiency	Max. Efficiency (Battery to AC)	> 94.5%
Protection	Protection Class	I
	Overvoltage Category	DC II /AC III
General Info.	Dimensions	398*285*168mm
	Net Weight	24kg
	Gross Weight	26kg
	Ambient Temperature Range	-20 ~ +60°C (Storage: -30 ~ +85°C)
	Relative Humidity	0-95%
	IP Rating	IP65
	Cooling Method	Natural Cooling
	Maximum Altitude	2000m
	Grid Connection	PEOP-B-M(B)
	Photovoltaic Connection	MC4
	Off-Grid Port	European Socket
	Display	LED
	Communication	Bluetooth, WFI, RS-485(RJ45) & Ethernet



VENUS A

**All-in-One 2.4kW 4 MPPT Balcony ESS
with 1.5kW AC-Coupling**



Specification Type		Extral Battery Specifications
		Model: EBM
Battery Info	Nominal Voltage	41.6V (13S)
	Battery Capacity	2.12kWh
	Cycle Life	> 6000 (25°C)
	Battery Chemistry	LiFePO4
	DoD (Depth of Discharge)	90%
	Number of Battery Modules	0 ~ 5PCS
	Total System Energy Capacity	2.12kWh ~ 12.72kWh
Efficiency	Max. Efficiency (Battery to AC)	> 94.5%
Protection	Protection Class	I
	Overvoltage Category (OVC)	DC II /AC III
General Info	Dimensions	398*285*108mm
	Net Weight	17kg
	Gross Weight	19kg
	Ambient Temperature Range	-20 ~ +60°C (Storage: -30 ~ +85°C)
	Relative Humidity	0 - 95%
	IP Rating	IP65
	Cooling Method	Nature Cooling
	Maximum Altitude	2000m
	Stacking Interface	Liu-Style