

MARSTEK

Power Anywhere & Anytime

MARSTEK VENUS A

All-in-One 2.4 kW 4 MPPT Balcony ESS with 1.2 kW AC-Coupling

4 MPPT for 2.4 kW Solar Power

1.2 kW Bidirectional On-Grid Power | 1.2 kW Backup Power (Peak at 1.44 kW)

EPS Switchover in 15 ms

Plug & Play | 100% Compatible with Existing Solar Systems

Modular Design | 2.12 kWh per Unit

Expandable to 12.72 kWh | Up to 5 Battery Packs

Anti Feed-in with MARSTEK, Shelly, everHome, Homewizard, and other Smart Meters

Whole-Home Backup via MARSTEK Smart Box

AI-Optimized TOU Management for Cost Savings

>6000 Cycles LFP Cells | 15 Years Lifespan | 10 Years Warranty

IP65 Waterproof & Dustproof | Operating Temp: -20°C to 60°C



Marstek Nederland

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Marstek Distributeur BENELUX



Levering & installatie: AM Elektrotechnik

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Officieel productblad Marstek

Marstek Venus A · inhoud ongewijzigd · blad 1/2

SPECIFICATIONS



Model	MARSTEK VENUS A
Host Battery Parameters	
Rated Voltage	41.6V (13S)
Capacity	2.12kWh
Cycle Life	>6000 (25°C)
Battery Cell Type	LiFePO ₄
Depth of Discharge (DoD)	90%
PV Input	
Maximum Input Power	2.4 kW
MPPT Operating Voltage Range	16~60 V
Maximum Input Current (Single Channel)	20 A
Number of MPPTs	4
MPPT Efficiency	99.80%
Backup (Off-Grid)	
Rated Output Power	1.2 kVA
Peak Output Power	1.44 kVA (60 s)
Rated Output Voltage	230 V / 50 Hz
THDu (Linear Load)	<3%
AC Input / Output	
Rated Output Power	1.2 kVA
Working Phase	L/N/PE
Rated Grid Voltage / Frequency	230 V / 50 Hz
Rated Grid Output Current	5.22 A / 3.48 A & 5.22 A
Power Factor	>0.99 (default), 0.8 lagging...0.8 leading (adjustable)
THDi (Total Harmonic Distortion of Current)	<3%
Efficiency	
Battery Side – AC Side Maximum Efficiency	>94.5%
Protection	
Protection Class	I
Overvoltage Withstand Level	DC II / AC III
Basic Parameters	
Ambient Temperature Range	-20°C ~ +60°C (Storage: -30°C ~ +85°C)
Relative Humidity	≤95%
IP Rating	IP65
Cooling Method	Natural Cooling
Maximum Operating Altitude	2000 m
PV Connector Type	MC4
Off-Grid Socket Type	European Socket
Display	LED
Communication Interfaces	Bluetooth, Wi-Fi, Ethernet
Dimensions	400 × 285 × 168 mm
Weight	24 kg



Model	MST-E2.0ST
Additional Battery Parameters	
Rated Voltage	41.6V (13S)
Capacity	2.12kWh
Cycle Life	>6000(25°C)
Battery Cell Type	LiFePO ₄
Depth of Discharge (DoD)	90%
Number of Storage Units	0-5 pcs
Total Storage Capacity	2.12 kWh ~ 12.72 kWh
Basic Parameters	
Ambient Temperature Range	-20°C ~ +60°C (Storage: -30°C ~ +85°C)
Relative Humidity	≤95%
IP Rating	IP65
Cooling Method	Natural Cooling
Maximum Operating Altitude	2000 m
Dimensions	400 × 285 × 108 mm
Weight	17 kg