MARSTEK

Power Anywhere & Anytime

MARSTEK VENUS E

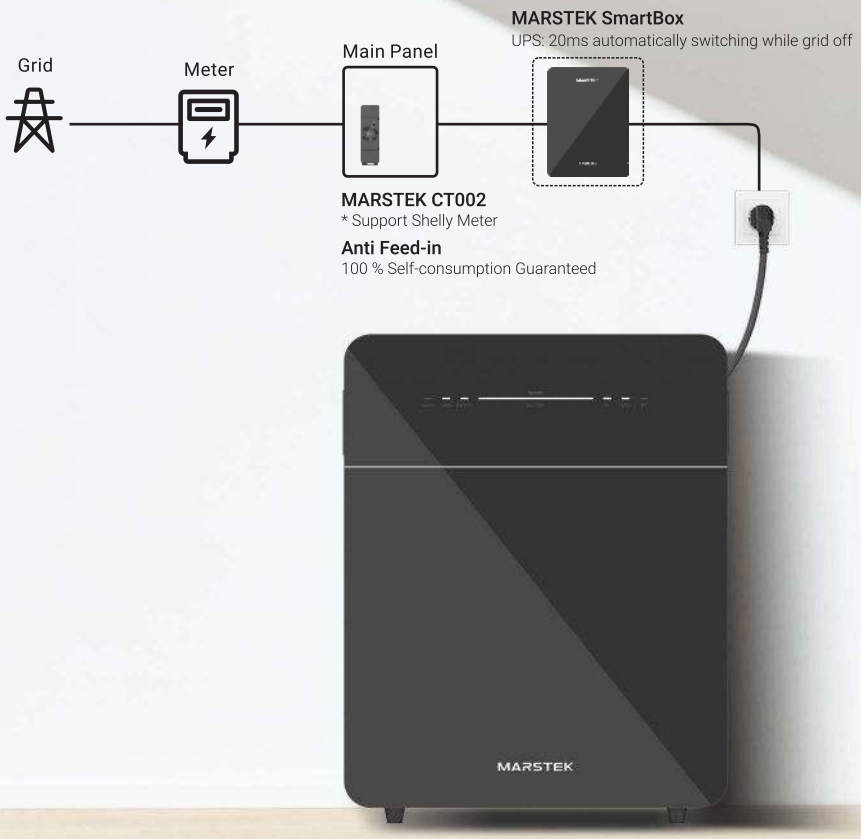
AC Battery ESS

800W/2.5kW On-grid, Plug & Play, Backup 2.5kW
5.12kWh LFP Battery, Cycle Life ≥6000

Compatible with Any PV System
Anti Feed-in,100% Self Consumption
Maxium Money Saving with AI Optimization
With MARSTEK CT002 / Shelly Smart Meter

Support Whole-home Single/Three Phase Backup
Single-Phase: up to 3 Units Parallel, 7.5kW/15.36kWh
Three-Phase: Each Phase up to 3 Units Parallel
Total 9 Units Parallel, 22.5kW/46.08kWh
With MARSTEK SmartBox

Support Integration with External EMS
Open API/Modbus Protocol
LAN/RS485/WIFI/BT



Marstek Energy Co., Limited

Add: BLDG#A, Changfang Industrial Park, No.2 Guihua 5th Road, Pingshan District, Shenzhen, Guangdong, China

Tel: 86-755-28398778 Email: market@marstekenergy.com Web: www.marstekenergy.com

Product Manual

SPECIFICATIONS



Model	MARSTEK VENUS-E
Battery Info	
Rated Voltage	51.2V (16S)
Capacity	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	NFEN50549-1, VDE4105/0124,G98,CE10-21,PETREE,PN-EN50549-1/-2,TORR25,UNE217001/217002,NTS631, AS47772
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	480*153*624mm
Weight	58 ± 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	LAN / WIFI / Bluetooth / RS485