

MARSTEK VENUS G

500V V-Boost Stackable 5kW AC-Coupled ESS

Up to 5kW Hybrid Inverter, Peak Power 10kW (1s)

500V V-Boost Eliminates Battery Imbalance

WireLite Easy Wiring for AC Coupling

Modular Design, Flexibly Expandable from 6 Battery Packs up to 30kWh

5kW Backup Power, Switchover Time < 10ms

Self-Consumption with Smart Meter for Anti Feed-in

Equipped with Marstek APP for Smart Real-Time Monitoring

Support Wi-Fi, Bluetooth, RS-485, and Ethernet Connectivity

LFP Battery with 6000+ Cycles, 10 Years Warranty

Wide Operating Temperature Range: -25°C to 60°C

IP65 Waterproof & Dustproof, Sub-30dB Operation



Marstek Energy Co., Limited

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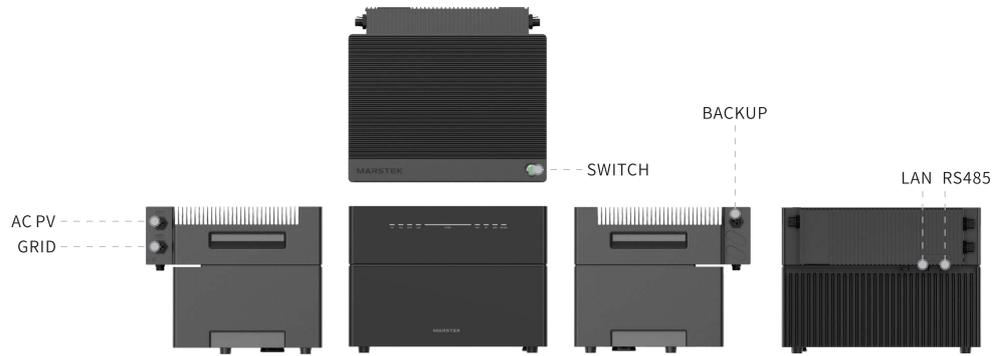
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SPECIFICATIONS



Model	VENUS G-3.6KSP	VENUS G-4.6KSP	VENUS G-5.0KSP
AC Output and Input (On-Grid)			
Nominal Output Power	3.6kW	4.6kW	5kW
Max. Output Apparent Power	4kVA	5.1kVA	5.5kVA
Nominal Output Current	15.7A	20A	21.7A
Max. Output Current	18A	23A	25A
Nominal Output Voltage/Frequency	230V (50Hz/60Hz)		
Power Factor	0.8 leading ~ 0.8 lagging		
Total Current Harmonic Distortion	THDi < 3%		
Max. Input Apparent Power	5.4kVA	6.9kVA	7.5kVA
Max. Input Current	23.5A	30A	32.6A
Efficiency			
Max. Efficiency	0.976		
European Efficiency	0.971		
Battery Conversion Efficiency	0.97		
AC PV Input			
Max. Input Apparent Power	5.4kVA	6.9kVA	7.5kVA
Nominal Input Voltage/Frequency	230V (50Hz/60Hz)		
Max. Input Current	23.5A	30A	32.6A
AC Output (Backup)			
Nominal Output Power	3.6kW	4.6kW	5kW
Max. Output Apparent Power	3.8kVA	4.8kVA	5.3kVA
Max. Output Current	16.4A	21A	22.8A
Peak Output Power (1 seconds)	150%~200%		
Peak Output Power (200 milliseconds)	>200%		
Nominal Output Voltage/Frequency	230V (50Hz/60Hz)		
Total Voltage Harmonic Distortion	THDv < 2%		
Disruption Time of Backup Switch	< 10ms		
Battery Connection			
Battery Module Models	MST-VENUS F-5.0KBAT		
Number of Modules per Inverter	1~6PCS		
Nominal Voltage of Battery Module	400V		
Voltage Range of Battery Module	350V~500V		
Max. Charging Power	5kW		
Max. Charging Current	14.3A		
Max. Discharging Power	5kW		
Max. Discharging Current	14.3A		
Protection			
Safety Protection Feature	Insulation Monitoring, Residual Current Monitoring, Anti-Islanding Protection, DC Reverse Polarity Protection, AC OW/OC/SC Protection, Type II DC/AC Surge Protection.		
General Data			
Dimensions (W/H/D)	480*135*(360+60)mm		
Weight	30kg		
Storage Temperature Range	-40°C~70°C		
Operating Temperature Range	-25°C~60°C		
Relative Humidity Range	0~100%		
Max. Operating Altitude	2000m		
Cooling	Natural Cooling		
Standby Power Consumption	<25W		
System Ingress Protection Rating	IP65		
Noise Level	<30dB		
Display	LED, App		
Communication	RS-485 for EMS, Wi-Fi/Bluetooth/Ethernet, Battery Access CAN (Internal)		
General IO	NC		
Standard Compliance			
Safety Standard	IEC/EN62109-1		
EMC Standard	IEC/EN61000-6-1~4 Class B		
On-Grid Standard	EN 50549-10, EN 50438, CEI 0-21, G98, UNE217001, UNE217002, NTS631, C10/C11:2021		