



## APPLE MARS SINGLE PHASE HYBRID INVERTER

SE5KHB-120



Energy Storage Inverter

### FEATURES

- »» Max efficiency 97.3%
- »» Max. PV Power 9KW
- »» String current 30A, compatible with high power modules
- »» Advanced parallel, up to 9Pcs
- »» Configure BMS management system to ensure high battery life
- »» Compatible with lead-acid batteries and lithium battery energy storage systems
- »» Remote configuration and upgrade
- »» 5 Year Warranty

<b>Efficiency</b>	
Max. efficiency (PV to AC)	97.3%
Max. efficiency (BAT to AC)	94.3%
<b>Input (PV)</b>	
MAX PV Power	9000W
Max PV voltage	550V
Max input current (input A/input B)	15A/15A
Max short current (input A/input B)	20A/20A
Start operating voltage	90V
MPPT voltage range	70V-540V
No. of MPPT trackers	2
String per MPP tracker	1
<b>Input (BAT)</b>	
Compatible battery type	Lithium-ion / Lead-acid
Nominal battery voltage	48V
Battery voltage range	40V-65V
Max. charge/discharge current	120A/120A
Max. charge/discharge power	6000W/6000W
Lithium battery charge curve	Self-adaption to BMS
<b>Output (Grid)</b>	
Nominal AC output power	5000W
Max. AC output apparent power	5500 VA
Max. AC output power (PF=1)	5500W
Max. AC output current	25 A
Rated AC voltage	230V , L+N+PE
AC voltage range	150V-300V (Adjustable)
Rated grid frequency	50 Hz / 60 Hz
AC frequency range	45 Hz -55 Hz /55 Hz -65 Hz (Adjustable)
Grid connection	Single phase
Power factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)
THDI	<3% (Rated Power)
<b>Output (Back up)</b>	
Nominal output power	5000W
Nominal output current	21.7A
Maximum power(Is)	10000VA
Nominal output voltage	230V, L+N+PE
Nominal output frequency	50Hz / 60Hz
Transfer time	10ms (typ) / 20ms (max)
THDV	<3% @100% R Load
<b>Protection</b>	
Protection category	Class I
DC switch	Support
Anti-islanding protection	Support
AC overcurrent protection	Support
AC short circuit protection	Support
DC reverse connection	Support
Surge Arrester	DC Type III, AC Type III
Insulation detection	Support
Leakage current protection	Support
PV overvoltage category	II
AC overvoltage category	III
Gen	Optional
<b>General</b>	
Max. operation altitude	4000m
Noise emission	<35dB
Ingress protection degree	IP65
Operating temperature range	-25 -60
Relative humidity	0-100 %
Cooling concept	Natural Cooling
Mounting	Wall bracket
Advanced parallel	Up to 9Pcs
Dimensions (W*H*D)	515mm*485mm*175mm
Weight	25Kg
PV connection way	MC4/H4
Battery connection way	Dedicated DC connector
AC connection way (grid & back up)	Dedicated AC connector
<b>HMI &amp; COM</b>	
Display	LED+APP
Communication interface	RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Optional: WiFi/GPRS/LAN
<b>Certification</b>	
Grid	VDE-AR-N4105, IEC 61727/62116, AS 4777.2, EN 50549-1, C10/11, G99, CEI 0-21, NRS 097-2-1, RD 1699/661/413
Safety	IEC62109-1&2, IEC62477-1
Warranty	5 Years /10 Years (Optional)