

# SINGLE PHASE HYBRID INVERTER

SE 4.6/5/6KHB-60, SE 4.6/5/6KHB-120



Energy Storage Inverter



## HIGH YIELD

- Max efficiency 97.3%, Battery efficiency 94%
- Max. Charge/Discharge Current 120A
- Reasonable energy control to increase the proportion of spontaneous use



## HIGH RELIABILITY

- With BMS system to ensure high battery life
- Natural cooling design



## INTELLIGENT MAINTENANCE

- Compatible with lead-acid batteries and lithium battery energy storage systems
- Remote configuration and upgrade

Model	SE 4K6HB-60	SE 4K6HB-120	SE 5KHB-60	SE 5KHB-120	SE 6KHB-60	SE 6KHB-120
<b>Efficiency</b>						
Max. efficiency (PV to AC)	97.3%					
Max. efficiency (BAT to AC)	94.0%					
<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-520V					
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-60V					
Max. charge/discharge current	60A/60A	120A/120A	60A/60A	120A/120A	60A/60A	120A/120A
Max. charge/discharge power	3000W/3000W	5000W/5000W	3000W/3000W	5000W/5000W	3000W/3000W	6000W/6000W
Lithium battery charge curve	Self-adaption to BMS					
<b>Output (Grid)</b>						
Nominal AC output power	4600W	4600W	5000W	5000W	6000W	6000W
Max. AC output apparent power	4600VA	4600VA	5500VA	5500VA	6000VA	6000VA
Max. AC output power (PF=1)	4600W	4600W	5500W	5500W	6000W	6000W
Max. AC output current	22A	22A	25A	25A	27.2A	27.2A
Rated AC voltage	220V					
AC voltage range	150V-300V (Adjustable)					
Rated grid frequency	50Hz / 60Hz					
AC frequency range	45Hz-55Hz/55Hz-65Hz (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 voltage	230V					
Nominal output frequency	50Hz / 60Hz					
Nominal output power	3000W	4600W	3000W	5000W	3000W	6000W
Nominal output current	13A	20A	13A	21.7A	13A	26A
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					
<b>General</b>						
Max. operation altitude	4000m					
Noise emission	<35dB					
Ingress protection degree	IP65					
Operating temperature range	-25°C~60°C					
Relative humidity	0~100%					
Cooling concept	Natural Cooling					
Mounting	Wall bracket					
Dimensions (W*H*D)	515mm*485mm*175mm					
Weight	20Kg	25Kg	20Kg	25Kg	20Kg	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, G99, CEI 0-21, NRS 097-2-1					
Safety	IEC62109-1&2, IEC62040-1, IEC62477-1					
Warranty	5 Years /10 Years (Optional)					

**Remarks:**

- The range of output voltage and frequency may vary depending upon different grid codes.
- Specifications are subject to change without advance notice.