

SINGLE PHASE HYBRID INVERTER

SE 3.6KHB-60, SE 4.6/5/6KHB-120

Application: Residential Use



EXCELLENT PERFORMANCE

- Maximum efficiency of 97.3% and battery efficiency of 94.3%
- Maximum 9kW PV input power
- Maximum battery charge/discharge current of 120A
- Large MPPT current, compatible with high-power solar panels
- Advanced parallel function



HIGH RELIABILITY

- Key components from international renowned brands
- IP65 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections



INTELLIGENT MAINTENANCE

- Quick commission via mobile app, 24/7 remote monitoring, configuration and upgrade
- Advanced energy management mechanism, with multiple built-in working modes and flexible customized settings
- Optional generator and smart load functions



Model	SE 3K6HB-60	SE 4K6HB-120	SE 5KHB-120	SE 6KHB-120
Efficiency				
Max. Efficiency (PV to AC)				97.3%
Eur. Efficiency (PV to AC)				96.8%
Max. Efficiency (BAT to AC)				94.3%
Input (PV)				
Max. PV Input Power	6,300W		9,000W	
Max. PV Voltage				550V
Start-up Voltage				90V
MPPT Operating Voltage Range				70V-540V
Max. Input Current per MPPT				15A/15A
Max. Short Circuit Current per MPPT				20A/20A
String per MPPT				1/1
Nos. of MPPT				2
Input/Output (BAT)				
Battery Type	Lithium-ion/Lead-acid			
Nominal Battery Voltage	48V			
Battery Voltage Range	40V-65V			
Max. Charge/Discharge Current	60A/60A	120A/120A	120A/120A	120A/120A
Max. Charge/Discharge Power	3,000W/3,000W	6,000W/6,000W	6,000W/6,000W	6,000W/6,000W
Output (Grid)				
Nominal AC Output Power	3,600W	4,600W	5,000W	6,000W
Max. AC Output Apparent Power	3,960VA	4,600VA	5,500VA	6,000VA
Max.AC Output Power (PF=1)	3,960W	4,600W	5,500W	6,000W
Max. AC Output Current	18A	22A	25A	27.2A
Nominal Grid Voltage	220V/230V/240V, L+N+PE			
Grid Voltage Range	150V-300V (Adjustable)			
Nominal Grid Frequency	50Hz/60Hz			
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)			
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
THDI	<3% (Rated Power)			
Output (Back up)				
Nominal Output Power	3,000W	4,600W	5,000W	6,000W
Nominal Output Current	13.1A	20A	21.7A	26.1A
Peak Output Apparent Power (>1s)	4,500VA	6,900VA	7,500VA	9,000VA
Nominal Output Voltage	220V/230V/240V, L+N+PE			
Nominal Output Frequency	50Hz/60Hz			
Transfer Time	<10ms (typical)			
THDV	<3% @100% R Load			
Protection				
Protection Category	Class I			
DC Switch	Yes			
Anti-islanding Protection	Yes			
AC Overcurrent Protection	Yes			
DC/AC Overvoltage Protection	DC Type II, AC Type III			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrester	DC Type III, AC Type III			
Insulation Resistance Detection	Yes			
Leakage Current Protection	Yes			
Generator	Optional			
General				
Max. Operating Altitude	4000m (>2000m derating)			
Ingress Protection Rating	IP65			
Operating Temperature Range	-25 C ~60 C (>45 C derating)			
Relative Humidity	0~100%			
Cooling Method	Natural Cooling			
Mounting	Wall bracket			
Dimensions (W*H*D)	515mm*487mm*175mm			
Weight	16Kg		25Kg	
PV Connection Way	MC4/H4			
Battery Connection Way	Dedicated DC connector			
AC Connection Way (Grid & Back up)	Dedicated AC connector			
HMI & COM				
Display	Bluetooth & APP + LED, LCD (Optional)			
Communication Interface	RS485/CAN (for BMS), RS485, Ethernet, DRM/RS485 (for Meter), Optional: Wi-Fi/LAN			
Certification				
Safety	IEC 62109-1&2, IEC62040-1, IEC 62477-1			
Grid	VDE 4105, IEC 61727/62116, AS 4777.2, EN 50549-1, C10/11, G98/G99/G100, CEI 0-21, NRS 097-2-1, RD 1699/661/647/413, UNE 217002			
Warranty				
5 Years				

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

