

SINGLE PHASE HYBRID INVERTER

SE 3/3.6/4.6/5/6KHB-D1/HV

Application: Residential Use



EXCELLENT PERFORMANCE

- Maximum efficiency of 97.8% and battery efficiency of 97.0%
- Maximum 12kW PV input power
- Maximum battery charge/discharge current of 42A
- Large MPPT current, compatible with high-power solar panels
- Supporting full-house load on backup port, with maximum capacity of 12kW



HIGH RELIABILITY

- Key components from international renowned brands
- IP66 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections, with optional AFCI



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



Model	SE 3KHB-D1/HV	SE 3K6HB-D1/HV	SE 4K6HB-D1/HV	SE 5KHB-D1/HV	SE 6KHB-D1/HV
Efficiency					
Max. Efficiency (PV to AC)				97.8%	
Eur. Efficiency (PV to AC)				97.5%	
Max. Efficiency (BAT to AC)				97.0%	
Input (PV)					
Max. PV Input Power				12,000W	
Max. PV Voltage				550V	
Start-up Voltage				90V	
MPPT Operating Voltage Range				70V-540V	
Max. Input Current per MPPT				16A/16A	
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	360V				
Battery Voltage Range	80V-480V				
Max. Charge/Discharge Current	42A/42A				
Max. Charge/Discharge Power	9,000W/4,200W		9,000W/6,600W		
Output (Grid)					
Nominal AC Output Power	3,000W	3,600W	4,600W	5,000W	6,000W
Max. AC Output Apparent Power	3,300VA	3,960VA	4,600VA	5,500VA	6,600VA
Max. AC Output Power (PF=1)	3,300W	3,960W	4,600W	5,500W	6,600W
Max. AC Output Current	15.0A	18.0A	21.0A	25.0A	28.7A
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	3,600W	4,600W	5,000W	6,000W
Nominal Output Current	13A	15.7A	20A	21.7A	26.1A
Peak Output Apparent Power (1min)	3,600VA	4,320VA	5,520VA	6,000VA	7,200VA
Peak Output Apparent Power (15s)	4,350VA	5,220VA	6,670VA	7,250VA	8,700VA
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 Over Current 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				
AFCI	Optional				
General					
Max. Operation Altitude	4000m (>2000m derating)				
Ingress Protection Degree	IP66				
Operating Temperature Range	-25~60 °C (>45 °C derating)				
Relative Humidity	0~100%				
Cooling Method	Natural Cooling				
Mounting	Wall bracket				
Dimensions (W*H*D)	470mm*360mm*172mm				
Weight	14.1Kg		14.6Kg		
PV Connection Way	MC4/H4				
HMI & COM					
Display	Bluetooth & APP + LED, LCD (optional)				
Communication interface	RS485/CAN (BMS), DRM/RS485 (for Meter), RS485, Optional: Wi-Fi/LAN				
Certification					
Safety	IEC 62109-1/2				
Grid	EN 50549-1, VDE 4105, AS 4777, CEI 0-21, G98/G99/G100, 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.