

THREE PHASE HYBRID INVERTER

SE 12/15/20/25/30KHB-D3



EXCELLENT PERFORMANCE

- Maximum efficiency 98.4%, battery efficiency 98%
- Maximum 150% PV input power, continuously 10% output overload, 150% unbalance output
- Maximum Charge/Discharge current 2*50A
- Large MPPT current, compatible with high-power solar panels
- Advanced parallel function



HIGH RELIABILITY

- Key components from international famous brands,
- IP65 protection rating, good adaptability to complex outdoor environment
- Multiple protections built-in, optional AFCI, RSD



INTELLIGENT MAINTENANCE

- Quick commission through APP, 7*24h remote monitoring, configuring, upgrading
- Advance energy management mechanism, multiple working modes built-in, and support flexible customized setting

Model	SE 12KHB-D3	SE 15KHB-D3	SE 20KHB-D3	SE 25KHB-D3	SE 30KHB-D3
Efficiency					
Max. Efficiency (PV to AC)	98.2%				98.4%
Eur. Efficiency (PV to AC)			97.9%		
Max. Efficiency (BAT to AC)			98%		
Input (PV)					
Max. PV Input Power	18000W	22500W	30000W	37500W	45000W
Max. PV Voltage	1000V				
Start-up Voltage	150V				
MPPT Voltage Range	160V-950V				
Max. Input Current	30A/30A				30A/30A/30A
Max. Short Circuit Current	40A/40A				40A/40A/40A
Nos. of MPPT	2				3
String per MPPT	2/2				2/2/2
Input/Output (BAT)					
Battery Type	Lithium-ion/Lead-acid				
Nominal Battery Voltage	250V-800V	320V-800V	420V-800V	260V-800V	320V-800V
Battery Voltage Range	150V-800V				
Max. Charge/Discharge Current	50A/50A				2*50A/2*50A
Max. Charge/Discharge Power	14,400W/ 13,600W	18,000W/ 17,000W	24,000W/ 22,680W	30,000W/ 28,350W	30,000/ 34,000W
Output (Grid)					
Nominal AC Output Power	12,000W	15,000W	20,000W	25,000W	30,000W
Max. AC Apparent Power	13,200W	16,500W	22,000W	27,500W	33,000W
Max. AC Output Power (PF=1)	13,200VA	16,500VA	22,000VA	27,500VA	33,000VA
Max. AC Output Current	3*20.1A	3*25.1A	3*33.4A	3*41.8A	3*50.1A
Max. Single Phase power	6,000W	7,500W	10,000W	11,000W	11,000W
Max. Input Power	30,000VA				45,000VA
Max. Input Current	3*50A				3*75A
Rated Grid Voltage	380V/400V/415V, 3W+N+PE				
Grid Voltage Range	277V-520V (Adjustable)				
Rated Grid Frequency	50Hz/60Hz				
AC 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	12,000W	15,000W	20,000W	25,000W	30,000W
Nominal Output Current	3*18.2A	3*22.7A	3*30.3A	3*37.9A	3*45.5A
Max. Single Phase Power	6,000W	7,500W	10,000W	11,000W	11,000W
Peak Power (5min)	14,400VA	18,000VA	24,000VA	30,000VA	36,000VA
Peak Power (10s)	18,000VA	22,500VA	30,000VA	37,500VA	45,000VA
Nominal Output Voltage	380V/400V, 3W+N+PE				
Nominal Output Frequency	50Hz/60Hz				
Transfer Time	10ms (typical)				
THDV	<3 (R Load)				
Protection					
Protection Category	Class I				
DC Switch	Yes				
Anti-islanding Protection	Yes				
AC Over Current Protection	Yes				
AC Over Voltage Protection	Yes				
AC Short Circuit Protection	Yes				
DC Reverse Protection	Yes				
Surge Arrester	DC Type II, AC Type II				
PV Insulation Detection	Yes				
Leakage Current Protection	Yes				
AFCI	Optional				
RSD	Optional				
General					
Max. Operation Altitude	4000m (>2000m derating)				
Protection Degree	IP66				
Operating Temperature Range	-25°C~60°C (>45°C derating)				
Relative Humidity	0~100%				
Cooling	Natural Cooling				Smart Fan Cooling
Mounting	Wall bracket				
Dimensions (W*H*D)	660mm*570mm*230mm				
Weight	45Kg				55Kg
PV Connection	MC4/H4				
HMI & COM					
Display	LED+APP, LCD(Optional)				
Communication Interface	RS485/CAN (for BMS), RS485, DRM/RS485 (for Meter), Optional: Wi-Fi/GPRS/LAN, 2*DO, 2*DI				
Certification					
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	IEC 62109-1&2, IEC 62477-1				
EMC	EN 61000				
Warranty	5 Years/10 Years (Optional)				

Remarks:

- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced noticed.