

SKYWORTH PV-Tech

2021



CARBON-FREE FUTURE



Designing Engineering Procurement Construction and Operation
DEPCO

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Shenzhen Skyworth Photovoltaic Technology Co., Ltd.

SUBSIDIARY OF SKYWORTH GROUP

Skyworth Group founded in 1988, mainly engaged in multimedia, smart appliances, smart system and modern service. The Group has two listed companies: Skyworth Group (00751.HK), Skyworth Digital (00810.SZ).

Shenzhen Skyworth Photovoltaic Technology Co.,Ltd. is a new energy IOT company integrating development, design, construction, operation, management and consultant services. We are committed to building a smart clean energy asset construction and management platform. We always insist on offering innovative residential solar power solution, creating smart green energy system for your home, and strive to make positive contributions to reach goal of global zero carbon.



SINGLE PHASE HYBRID INVERTER

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



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	SP 4K6HB-60	SP 4K6HB-120	SP 5KHB-60	SP 5KHB-120	SP 6KHB-60	SP 6KHB-120
Efficiency						
Max. efficiency (PV to AC)				97.3%		
Max. efficiency (BAT to AC)				94.0%		
Input (PV)						
MAX PV Power (W)				9000		
Max PV voltage (V)				550		
Max input current (input A/input B) (A)				15/15		
Max short current (input A/input B) (A)				20/20		
Start operating voltage (V)				90		
MPPT voltage range @full load (V)	200-480			230-480		
No. of MPPT trackers				2		
String per MPP tracker				1		
Input (BAT)						
Compatible battery type	Lithium-ion/Lead-acid					
Nominal battery voltage (V)	48					
Battery voltage range (V)	40-60					
Max. charge/discharge current (A)	60/60	120/120	60/60	120/120	60/60	120/120
Max. charge/discharge power (W)	3000/3000	5000/5000	3000/3000	5000/5000	3000/3000	6000/6000
Lithium battery charge curve	Self-adaption to BMS					
Output (Grid)						
Nominal AC output power (W)	4600	4600	5000	5000	6000	6000
Max. AC output apparent power (VA)	4600	4600	5500	5500	6000	6000
Max. AC output power (PF=1) (W)	4600	4600	5500	5500	6000	6000
Max. AC output current (A)	22	22	25	25	27.2	27.2
Rated AC voltage (V)	220					
AC voltage range (V)	150-300 (adjustable)					
Rated grid frequency (Hz)	50/60					
AC frequency range (Hz)	45-55/55-65 (adjustable)					
Grid connection	single phase					
Power factor	> 0.99 @rated power (adjustable 0.8 LG - 0.8 LD)					
THDI	<3%					
Output (Back up)						
Nominal output voltage (V)	230					
Nominal output frequency (Hz)	50/60					
Nominal output power (W)	3000	4600	3000	5000	3000	6000
Nominal output current (A)	13	20	13	21.7	13	26
Transfer time (ms)	10(typ) / 20(max)					
THDV	<3% @100% R Load					
Protection						
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					
General						
Max. operation altitude (m)	4000					
Noise emission (dB)	<35					
Ingress protection degree	IP65					
Operating temperature range (°C)	-25~60					
Relative humidity (%)	0~100					
Cooling concept	Natural Cooling					
Mounting	Wall bracket					
Dimensions (W*H*D)	515*450*175mm					
Weight (kg)	20	25	20	25	20	25
PV connection way	MC4/H4					
Battery connection way	Dedicated DC connector					
AC connection way (grid & back up)	Dedicated AC connector					
HMI & COM						
Display	LED+APP					
Communication interface	RS485/CAN(for BMS), RS485, USB, Ethernet, DRM/RS485 (for Meter), Optional: WiFi/GPRS					
Certification						
Grid	VDE-AR-N4105, IEC 61727/62116, AS 4777.2, EN 50549-1					
Safety	IEC62109-1&2, IEC62040-1, IEC62477-1					
EMC	IEC61000-6-2/3					
Warranty (years)	5/10 (optional)					

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