

# Three Phase Hybrid Inverter

SUN-5/6/8/10/12/15/20/25K-SG01HP3-EU-AM2



- 100** 100% unbalanced output, each phase
- AC** AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50** Max. charging/discharging current of 50A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- GEN** Support storing energy from diesel generator

Model	SUN-5K-SG01 HP3-EU-AM2	SUN-6K-SG01 HP3-EU-AM2	SUN-8K-SG01 HP3-EU-AM2	SUN-10K-SG01 HP3-EU-AM2	SUN-12K-SG01 HP3-EU-AM2	SUN-15K-SG01 HP3-EU-AM2	SUN-20K-SG01 HP3-EU-AM2	SUN-25K-SG01 HP3-EU-AM2	
<b>Battery Input Data</b>									
Battery Type	Lithium-ion								
Battery Voltage Range (V)	160-700								
Max. Charging Current (A)	30	30	37			50			
Max. Discharging Current (A)	30	30	37			50			
Charging Strategy for Li-ion Battery	Self-adaption to BMS								
Number of Battery Input	1								
<b>PV String Input Data</b>									
Max. PV Input Power (W)	6500	7800	10400	13000	15600	19500	26000	32500	
Max. PV Input Voltage (V)	1000								
Start-up Voltage (V)	180								
MPPT Voltage Range (V)	150-850								
Rated PV Input Voltage (V)	600						700		
Max. Operating PV Input Current (A)	20+20			26+20			26+26		
Max. Input Short-Circuit Current (A)	30+30			39+30			39+39		
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/1+1			2/2+1			2/2+2		
<b>AC Input/Output Data</b>									
Rated AC Input/Output Active Power (W)	5000	6000	8000	10000	12000	15000	20000	25000	
Max. AC Input/Output Apparent Power (VA)	5500	6600	8800	11000	13200	16500	22000	27500	
Rated AC Input/Output Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4	22.8/21.8	30.4/29	37.9/36.3	
Max. AC Input/Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2	25/24	33.4/31.9	41.7/39.9	
Max. Continuous AC Passthrough (grid to load) (A)	40				80				
Peak Power (off-grid) (W)	1.5 times of rated power, 10s								
Power Factor Adjustment Range	0.8 leading to 0.8 lagging								
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un								
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65								
Grid Connection Form	3L+N+PE								
Total Current Harmonic Distortion THDi	<3% (of nominal power)								
DC Injection Current	<0.5% In								
<b>Efficiency</b>									
Max. Efficiency	97.6%								
Euro Efficiency	97.0%								
MPPT Efficiency	>99%								
<b>Equipment Protection</b>									
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level								
Surge Protection Level	TYPE II(DC), TYPE II(AC)								
<b>Interface</b>									
Communication Interface	RS485/RS232/CAN								
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)								
<b>General Data</b>									
Operating Temperature Range ( )	-40 to +60°C, >45°C Derating								
Permissible Ambient Humidity	0-100%								
Permissible Altitude	2000m								
Noise (dB)	≤55								
Ingress Protection(IP) Rating	IP 65								
Inverter Topology	Non-Isolated								
Over Voltage Category	OVC II(DC), OVC III(AC)								
Cabinet Size (WxHxD mm)	408×638×237 (Excluding Connectors and Brackets)								
Weight (kg)	30.5								
Type of Cooling	Natural Cooling		Intelligent Air Cooling						
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy								
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105								
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2								