

Hybrid Inverter

SUN-5/6/7.6/8K-SG01LP1-US



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 190A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Model	SUN-5K -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7.6K -SG01LP1-US	SUN-8K -SG01LP1-US
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	120	135	190	190
Max. Discharging Current (A)	120	135	190	190
External Temperature Sensor	Yes			
Charging Curve	3 Stages / Equalization			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	6500	7800	9880	10400
Rated PV Input Voltage (V)	370 (125-500)			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Full Load DC Voltage Range (V)	300-425	200-425		
PV Input Current (A)	13+13	26+13	26+26	
Max. PV I _{SC} (A)	22+22	44+22	44+44	
No.of MPP Trackers	2			
No.of Strings per MPP Tracker	1+1	2+1	2+2	
AC Output Data				
Rated AC Output Active Power (W)	5000	6000	7600	8000
Max AC Output Active Power (W)	5500	6600	8360	8800
AC Output Rated Current (A)	20.8	25	31.7	33.3
Max. AC Output Current (A)	22.9	27.5	34.8	36.7
Max. Continuous AC Passthrough (A)	50			
Peak Power (off grid)	2 time of rated power, 10 S			
Power Factor Adjustment Range	0.9-1			
Rated Input/Output Voltage/Range(V)	120/240,208 0.88Un-1.1Un			
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz			
Grid Connection Form	2L+N+PE			
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)			
DC Current Injection	<0.5% I _n			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
Protection				
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection			
Over Voltage Category	DC Type II/AC Type III			
Certifications and Standards				
Grid Regulation	EN 50549, UNE 217002, NRS 097, IEEE 1547.1, SRD V2.0			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, UL 1741			
General Data				
Operating Temperature Range (°F)	-40 to +60°C, >45°C Derating			
Cooling	Smart Cooling			
Noise (dB)	≤30 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	32			
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 Years/10 Years			
the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				