

Hybrid Inverter

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



Colorful touch LCD, IP65 protection degree

6

6 time periods for battery charging/discharging

190

Max. charging/discharging current of 190A

16

Frequency droop control, Max.16pcs parallel



DC couple and AC couple to retrofit existing solar system



Support storing energy from diesel generator

Deye

Clean Power For You

Model	SUN-5K-SG01LP1 -US	SUN-6K-SG01LP1 -US	SUN-7.6K-SG01LP1 -US/EU	SUN-8K-SG01LP1 -US/EU		
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		
Charging Curve	3 Stages / Equalization					
External Temperature Sensor	Yes					
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 Range (V)	150-425					
Full Load DC Voltage Range (V)	300-425	200-425				
PV Input Current (A)	13+13	26+13	26+26	26+26		
Max. PV ISC (A)	17+17	34+17	34+34	34+34		
Number of MPPT / Strings per MPPT	2/1+1	2/2+1	2/2+2	2/2+2		
AC Output Data						
Rated AC Output and UPS Power (W)	5000	6000	7600	8000		
Max. AC Output Power (W)	5500	6600	8360	8800		
Peak Power (off grid)	2 times of rated power, 10 S					
AC Output Rated Current (A)	20.8 / 24	25 / 28.8	31.7 / 36.5	34.5	33.3 / 38.5	36.4
Max. AC Current (A)	22.9 / 26.4	27.5 / 31.7	34.8 / 40.2	38	36.7 / 42.3	40
Max. Continuous AC Passthrough (A)	40			50		
Power Factor	0.8 leading to 0.8 lagging					
Output Frequency and Voltage	50 / 60Hz; 120 / 240Vac (split phase), 208Vac (2 / 3 phase), 220/230Vac (single phase)					
Grid Type	Split phase; 2 / 3 phase; Single Phase					
Current Harmonic Distortion	THD<3% (Linear load<1.5%)					
Efficiency						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
Protection						
PV Input Lightning Protection	Integrated					
Anti-islanding Protection	Integrated					
PV String Input Reverse Polarity Protection	Integrated					
Insulation Resistor Detection	Integrated					
Residual Current Monitoring Unit	Integrated					
Output Over Current Protection	Integrated					
Output Shorted Protection	Integrated					
Output Over Voltage Protection	Integrated					
Surge protection	DC Type II / AC Type II					
Certifications and Standards						
Grid Regulation	ABNT NBR 16149,ABNT NBR 16150,ABNT NBR 62116, AS4777.2, VDE 0126-1-1, NRS 097-2-1, CEC Guideline, UL1741, CSA C22.2 NO.107.1-16, UL 1741 SA, CPUC RULE 21, UL1699B, UL 1741 CRD					
Safety EMC / Standard	IEC62109-1/-2, IEC61000-6-1, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, IEC61000-2-2, 47 CFR Part 15					
General Data						
Operating Temperature Range (°C)	-25~60°C, >45°C Derating					
Cooling	Smart cooling					
Noise (dB)	<30 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	32					
Size (mm)	420W×670H×233D					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 years					