

# Hybrid Inverter

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



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

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

190

Max. charging/discharging current of 190A

6

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/EU	SUN-8K -SG01LP1-US/EU		
<b>Battery Input Data</b>						
Battery Type	Lead-acid or Li-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					
<b>PV String Input Data</b>						
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 ISC (A)	17+17	34+17	34+34			
Number of MPPT / Strings per MPPT	2/1+1	2/2+1	2/2+2			
<b>AC Output Data</b>						
Rated AC Output and UPS Power (W)	5000	6000	7600	8000		
Max. AC Output Power (W)	5500	6600	8360	8800		
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			
Peak Power (off grid)	2 time of rated power, 10 S					
Power Factor	0.8 leading to 0.8 lagging					
Output Frequency and Voltage	50 / 60Hz; L1/L2/N(PE) 120/240Vac (split phase), 208Vac (2/3 phase), L/N/PE 220/230Vac (single phase)					
Grid Type	Split phase; 2/3 phase; Single Phase					
DC injection current (mA)	THD<3% (Linear load<1.5%)					
<b>Efficiency</b>						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
<b>Protection</b>						
Integrated	PV Input Lightning Protection, 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					
Output Over Voltage Protection	DC Type II/AC Type III					
<b>Certifications and Standards</b>						
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11					
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					
<b>General Data</b>						
Operating Temperature Range (°C)	-45~60°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					