

# 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
<b>Battery Input Data</b>				
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 Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1			
<b>PV String Input Data</b>				
Max. DC Input Power (W)	6500	7800	9880	10400
Max. DC Input Voltage (V)	500			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Rated DC Input Voltage (V)	370			
Max. Operating PV Input Current (A)	13+13	26+13	26+26	
Max. Input Short-Circuit Current (A)	22+22	44+22	44+44	
	2/1+1	2/2+1	2/2+2	
<b>AC Input/Output Data</b>				
Rated AC Input/Output Active Power (W)	5000	6000	7600	8000
Max. AC Input/Output Apparent Power (VA)	5500	6600	8360	8800
Rated AC Input/Output Current (A)	20.8	25	31.7	33.3
Max. AC Input/Output Current (A)	22.9	27.5	34.8	36.7
Max. Continuous AC Passthrough (grid to load) (A)	40		50	
Peak Power (off-grid) (W)	2 times of rated power, 10s			
Power Factor Adjustment Range	0.9-1			
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<0.5% In			
<b>Efficiency</b>				
Max. Efficiency	97.6%			
Euro Efficiency	96.5%			
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	WIFI, RS485, CAN			
Operating Temperature Range (				

Grid Regulation  
Safety / EMC Standard

EN 50549, UNE 217002, NRS 097, IEEE 1547.1, SRD V2.0  
IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, UL 1741