

Hybrid Inverter

SUN-7.6/8K-SG05LP1-AU



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-7.6K-SG05LP1-AU	SUN-8K-SG05LP1-AU
Battery Input Data		
Battery Type	Lead-acid or Li-Ion	
Battery Voltage Range (V)	40~60	
Max. Charging Current (A)	190	190
Max. Discharging Current (A)	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)	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)	200-425	
PV Input Current (A)	26+26	
Max. PV ISC (A)	39+39	
Number of MPPT / Strings per MPPT	2/1+1	
AC Output Data		
Rated AC Output and UPS Power (VA)	7600	8000
Max. AC Output Power (W)	7600	8000
AC Output Rated Current (A)	33/31.7	34.8/33.3
Max. AC Current (A)	33/31.7	34.8/33.3
Max. Continuous AC Passthrough (A)	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	50Hz; L/N/PE 230V/ 195.5V-253V 240V/204V-264V	
Grid Type	Single Phase	
Total harmonic Distortion(THD)	< 3% (of nominal power)	
DC current injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	97.00%	
MPPT Efficiency	99.90%	
Protection		
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	
Certifications and Standards		
Grid Regulation	AS/NZS 4777.2	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	
General Data		
Operating Temperature Range (°C)	-40~60°C, >45°C derating	
Cooling	Natural cooling	
Noise (dB)	<30 dB	
Communication with BMS	RS485; CAN	
Weight (kg)	24	
Size (mm)	330W x 580H x232D	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 years	