

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			