







Hybrid Inverter



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
-  Max. 16pcs 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

Technical Data

Model	SUN-5K -SG01LP1-US	SUN-8K -SG01LP1-US/EU
Battery Input Data		
Battery Type	Lead-acid or Li-Ion	
Battery Voltage Range (V)	40~60	
Max. Charging Current (A)	120	190
Max. Discharging Current (A)	120	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)	6500	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+26
Max. PV ISC (A)	17+17	34+34
Number of MPPT / Strings per MPPT	2/1+1	2/2+2
AC Output Data		
Rated AC Output and UPS Power (W)	5000	8000
Max. AC Output Power (W)	5500	8800
AC Output Rated Current (A)	20.8/24	33.3/38.5 36.4
Max. AC Current (A)	22.9/26.4	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%)	
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	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	
General Data		
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	