

# Hybrid Inverter

## SUN-3.6/5/8K-SG03LP1-EU



Colorful touch LCD,  
IP65 protection degree



6 time periods for battery  
charging/discharging



Max. charging/discharging  
current of 190A



Frequency droop control,  
Max. 16pcs parallel



DC couple and AC couple to  
retrofit existing solar system



Support storing energy from  
diesel generator

Model	SUN-3.6K-SG03LP1-EU	SUN-5K-SG03LP1-EU	SUN-8K-SG03LP1-EU
<b>Battery Input Data</b>			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40~60		
Max. Charging Current (A)	90	120	190
Max. Discharging Current (A)	90	120	190
Charging Curve	3 Stages / Equalization		
External Temperature Sensor	Yes		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
<b>PV String Input Data</b>			
Max. DC Input Power (W)	4680	6500	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+26	
Max. PV ISC (A)	17+17	34+34	
Number of MPPT / Strings per MPPT	2/1+1	2/2+2	
<b>AC Output Data</b>			
Rated AC Output and UPS Power (W)	3600	5000	8000
Max. AC Output Power (W)	3960	5500	8800
Peak Power (off grid)	2 times of rated power, 10 S		
AC Output Rated Current (A)	16.4	22.7	36.4
Max. AC Current (A)	18	25	40
Max. Continuous AC Passthrough (A)	35		50
Power Factor	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	50/60Hz; 220/230Vac (single phase)		
Grid Type	Single Phase		
Current Harmonic Distortion	THD<3% (Linear load<1.5%)		
<b>Efficiency</b>			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	99.90%		
<b>Protection</b>			
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		
<b>Certifications and Standards</b>			
Grid Connection Standard	EN50549-1, CEI 0-21, IEC61727, IEC62116, IEC60068, IEC61683, ABNT NBR 16149, ABNT NBR 16150, AS4777.2, VDE 4105, XP C15-712-3, RD1699, UNE 206006 IN, UNE 206007-1 IN		
Safety EMC / Standard	IEC62040-1, IEC62109-1/-2, IEC61000-6-1, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, IEC61000-4-16, IEC61000-4-18, IEC61000-4-29		
<b>General Data</b>			
Operating Temperature Range (°C)	-25~60°C, >45°C Derating		
Cooling	Natural cooling		
Noise (dB)	<30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	20.5		
Size (mm)	330Wx580Hx232D		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 years		