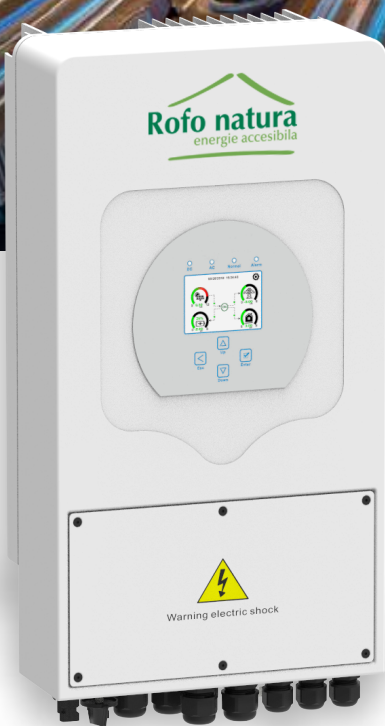


# Hybrid Inverter

SUN-3.6/5/6/7.6/8K-SG05LP1-EU



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

Max. 16 pcs 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

# Technical Data

Model	SUN-3.6K -SG05LP1-EU	SUN-5K -SG05LP1-EU	SUN-6K -SG05LP1-EU	SUN-7.6K -SG05LP1-EU	SUN-8K -SG05LP1-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	135	190	190
Max. Discharging Current (A)	90	120	135	190	190
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
<b>PV String Input Data</b>					
Max. DC Input Power (W)	4680	6500	7800	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)	300-425		200-425		
PV Input Current (A)	13+13		26+26		
Max. PV I <sub>SC</sub> (A)	17+17		34+34		
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1		2+2		
<b>AC Output Data</b>					
Rated AC Output Active Power (W)	3600	5000	6000	7600	8000
Max AC Output Active Power (W)	3960	5500	6600	8360	8800
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	34.5/33	36.4/34.8
Max AC Output Current (A)	18/17.2	25/23.9	30/28.7	38/36.3	40/38.3
Max. Continuous AC Passthrough (A)	35		40	50	
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Power Factor	1				
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac				
Grid Type	Single Phase				
Total Harmonic Distortion (THD)	<3% (of nominal power)				
DC Current Injection	<0.5% I <sub>n</sub>				
<b>Efficiency</b>					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
MPPT Efficiency	99.90%				
<b>Protection</b>					
Integrated	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				
Over Voltage Category	DC Type II/AC Type III				
<b>Certifications and Standards</b>					
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
<b>General Data</b>					
Operating Temperature Range ( )	-40-60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	24				
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				