



HYBRID SOLAR INVERTER

Three Phase 5-12KW, 2 MPPT Hybrid Inverter

SUN-5/6/8/10/12K-SG04LP3



Screen & IP65
Colorful touch LCD,
IP65 protection degree



Galvanic coupling
DC couple and AC couple to
retrofit existing solar system



Maximum Current
Max. charging/discharging
current of 240A



Charging/Discharging
6 time periods for battery
charging/discharging



Generator Storing
Support storing energy from
diesel generator

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Model	SUN-5K-SG04LP3-EU	SUN-6K-SG04LP3-EU	SUN-8K-SG04LP3-EU	SUN-10K-SG04LP3-EU	SUN-12K-SG04LP3-EU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max. Charging Current (A)	120	150	190	210	240
Max. Discharging Current (A)	120	150	190	210	240
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	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160-800)				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Full Load DC Voltage Range (V)	350-650				
PV Input Current (A)	13+13			26+13	
Max. PV Isc (A)	17+17			34+17	
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1			2+1	
AC Output Data					
Rated AC Output Active Power (W)	5000	6000	8000	10000	12000
Max AC Output Active Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6/7.2	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max. AC Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/15.9	20/19.1
Max. Three-phase Unbalanced Output Current (A)	11.4/10.9	13.6/13	18.2/17.4	22.7/21.7	27.3/26.1
Max. Output short circuit current(A)	75				
Max. Continuous AC Passthrough (A)	45				
Peak Power (Off Grid)	2 time of rated power, 10 S				
Power Factor	0.8 lagging to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three 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	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	DC Type III / AC Type III				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
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				
General Data					
Operating Temperature Range (°C)	-40-60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	33.6				
Cabinet Size (WxHxD mm)	422×702×281 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				