



# Three Phase Hybrid Inverter

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



- 100** 100% unbalanced output, each phase; Max. output up to 50% rated power
-  AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 240** Max. charging/discharging current of 240A
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

**Deye**

Stock Code: 605117.SH

Model	SUN-5K -SG04LP3-EU-LV	SUN-6K -SG04LP3-EU-LV	SUN-8K -SG04LP3-EU-LV	SUN-10K -SG04LP3-EU-LV	SUN-12K -SG04LP3-EU-LV
<b>Battery Input Data</b>					
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				
<b>PV String Input Data</b>					
Max. DC Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (V)	400 (160-600)				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-450				
Full Load DC Voltage Range (V)	350-450				
PV Input Current (A)	13+13			26+13	
Max. PV I <sub>sc</sub> (A)	19.5+19.5			39+19.5	
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1			2+1	
<b>AC Output Data</b>					
Rated AC Output Active Power (W)	5000	6000	8000	10000	12000
Max AC Output Active Power (W)	5000	6000	8000	10000	12000
AC Output Rated Current (A)	12.6	15.1	20.1	25.1	30.1
Max. AC Output Current (A)	12.6	15.1	20.1	25.1	30.1
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 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 133/230Vac				
Grid Type	Three Phase				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% I <sub>n</sub>				
<b>Efficiency</b>					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
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	DC Type III / AC Type III				
Over Voltage Category	DC Type II/AC Type III				
<b>Certifications and Standards</b>					
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105				
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)	≤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)				