



# Three Phase Hybrid Inverter

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



- 100%** 100% unbalanced output, each phase  
Max. output up to **50%** rated power
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
- 240** Max. charging/discharging current of 240A
- 16** Frequency droop control, Max.16pcs parallel
-  DC couple and AC couple to retrofit existing solar system
-  Support storing energy from diesel generator

**Deye**

*Clean Power For You*

Model	SUN-5K-SG04LP3-EU	SUN-6K-SG04LP3-EU	SUN-8K-SG04LP3-EU	SUN-10K-SG04LP3-EU	SUN-12K-SG04LP3-EU
<b>Battery Input Data</b>					
Battery Type	Lead-acid or Li-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
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)	6500	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160~800)				
Start-up Voltage (V)	160				
MPPT 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	
Number of MPPT / Strings per MPPT	2/1+1			2/2+1	
<b>AC Output Data</b>					
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000
Max. AC Output Power (W)	5500	6600	8800	11000	13200
Peak Power (off grid)	2 times of rated power, 10 S				
AC Output Rated Current (A)	7.6	9.1	12.1	15.2	18.2
Max. AC Current (A)	11.4	13.6	18.2	22.7	27.3
Max. Continuous AC Passthrough (A)	45				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 220/380, 230/400Vac				
Grid Type	Three Phase				
Current Harmonic Distortion	THD<3% (Linear load<1.5%)				
<b>Efficiency</b>					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Euro Efficiency Battery to AC	95.5%				
<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 Regulation	EN50549, AS4777.2, VDE0126, IEC61727, VDEN4105, G99, NBT32004, CEI0-21, NRS097, NBR16149/16150, RD1699				
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4				
<b>General Data</b>					
Operating Temperature Range (°C)	-25~60°C, >45°C Derating				
Cooling	Smart cooling				
Noise (dB)	<45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	34.5				
Size (mm)	422W×702H×281D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

This Inverter is designed for photovoltaic systems, which is equipped with photovoltaic and battery inputs and is capable of islanding operation.

**Ningbo Deye Inverter Technology Co., Ltd**

Add: No.26-30, South Yongjiang Road, Beilun, 315806, Ningbo, China | Tel: 0086-0574-86120560 | E-mail: market@deye.com.cn | Web: www.deyeinverter.com