

Three Phase Hybrid Inverter

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



100

100% unbalanced output, each phase; Max. output up to 50% rated power



AC couple to retrofit existing solar system

16

Max. 16pcs 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-AU	SUN-6K -SG04LP3-AU	SUN-8K -SG04LP3-AU	SUN-10K -SG04LP3-AU	SUN-12K -SG04LP3-AU
Battery Input Data					
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
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. PV Input Power (W)	7500	9000	12000	15000	18000
Rated PV Input Voltage (V)	550 (160-800)				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Full Load PV Voltage Range (V)	350-650				
PV Input Current (A)	13+13			26+13	
Max. PV I _{SC} (A)	19.5+19.5			39+19.5	
Number of MPPT / Strings per MPPT	2/1+1			2/2+1	
AC Output Data					
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000
Rated Apparent Output Power (VA)	5000	6000	8000	10000	12000
Max. AC Output Power (W)	5000	6000	8000	10000	12000
Rated AC Output Current (A)	7.2	8.7	11.6	14.5	17.4
Max. AC Output Current (A)	7.2	8.7	11.6	14.5	17.4
Max. Three-phase Unbalanced Output Current (A)	10.9	13	17.4	21.7	26.1
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	50Hz; 3L/N/PE 230/400, 240/415Vac				
Grid Connection Form	3L+N+PE				
Total Harmonics Current Distortion (THDi)	< 3% (of nominal power)				
DC current injection	<0.5% I _n				
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				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
Grid Regulation	AS/NZS 4777.2				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range ()	-40 to +60 , >45 derating				
Cooling	Smart cooling				
Noise (dB)	≤55 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	38				
Size (mm)	422W×658H×254D (Excluding connectors and brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	10 Years				