

Hybrid Inverter

SUN-3K-SG04LP1-24-EU-SM1

SUN-3K-SG04LP1-EU-SM1

SUN-3.6/5/6K-SG04LP1-EU-SM2



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 140A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Technical Data

Model	SUN-3K-SG04LP1 -24-EU-SM1	SUN-3K-SG04LP1 -EU-SM1	SUN-3.6K-SG04LP1 -EU-SM2	SUN-5K-SG04LP1 -EU-SM2	SUN-6K-SG04LP1 -EU-SM2
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	20-30	40-60	40-60	40-60	40-60
Max. Charging Current (A)	140	70	90	120	135
Max. Discharging Current (A)	140	70	90	120	135
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)	3900	3900	4680	6500	7800
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				
PV Input Current (A)	13	13+13			
Max. PV I _{SC} (A)	17	17+17			
No.of MPP Trackers	1	2			
No.of Strings per MPP Tracker	1	1+1			
AC Output Data					
Rated AC Output Active Power (W)	3000		3600	5000	6000
Max AC Output Active Power (W)	3300		3960	5500	6600
AC Output Rated Current (A)	13.6/13		16.4/15.7	22.7/21.7	27.3/26.1
Max. AC Output Current (A)	15/14.3		18/17.2	25/23.9	30/28.7
Max. Continuous AC Passthrough (A)	35				40
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 Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% I _N				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
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	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				
General Data					
Operating Temperature Range ()	-40 to +60°C, >45°C Derating				
Cooling	Free Cooling				Smart Cooling
Noise (dB)	≤30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	14			15	
Cabinet Size (WxHxD mm)	330×433×238 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				