

Single Phase Hybrid Inverter

SUN-3K-SG04LP1-24-EU
SUN-3/3.6/5/6K-SG04LP1-EU



Intuitive

- Colorful touch LCD, IP65 protection degree



Intelligent

- 6 time periods for battery charging/discharging



Flexible

- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; support multiple batteries parallel



Reliable

- Max. charging/discharging current of 140A
- Support storing energy from diesel generator

Model	SUN-3K -SG04LP1-24-EU	SUN-3K -SG04LP1-EU	SUN-3.6K -SG04LP1-EU	SUN-5K -SG04LP1-EU	SUN-6K -SG04LP1-EU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	20-30	40-60			
Max. Charging/Discharging Current (A)	140	70	90	120	135
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV access power (W)	6000	7200	10000	12000	
Max. PV Input Power (W)	4800	5760	8000	9600	
Max. PV Input Voltage (V)	500				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Rated PV Input Voltage (V)	370				
Max. Operating PV Input Current (A)	18	18+18			
Max. Input Short-Circuit Current (A)	27	27+27			
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1	2/1+1			
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	3600	3600	5000	6000	
Max. AC Input/Output Apparent Power (VA)	3300	3960	5000	6600	
Rated AC Input/Output Current (A)	13.6/13	16.4/15.7	22.7/21.7	27.3/26.1	
Max. AC Input/Output Current (A)	15/14.3	18/17.2*	25/23.9	30/28.7	
Max. Continuous AC Passthrough (grid to load) (A)	35				
Peak Power (off-grid) (W)	2 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated input/output voltage	220/230V 0.85Un-1.1Un L+N+PE				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency	97.6%				
Max. Efficiency	96.5%				
Euro Efficiency	>99%				
Equipment Protection					
MPPT Efficiency	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (AFCI) (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection				
Integrated					
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
LCD/LED Display	LCD				
Communication Interface	WIFI, RS485, CAN				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise (dB)	<30				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated (solar), Isolated (battery)				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	330×433×228 (Excluding Connectors and Brackets)				
Weight (kg)	17				
Type of Cooling	Natural Cooling				
Warranty	Intelligent Air Cooling				
Grid Regulation	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				
Safety / EMC Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105				
	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				