

# Single Phase Hybrid Inverter

SUN-3K-SG06LP1-24-EU-CM1    SUN-3K-SG06LP1-EU-CM1  
SUN-3.6/4/4.6/5/6K-SG06LP1-EU-CM2



## 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-SG06 LP1-24-EU-CM1	SUN-3K-SG06 LP1-EU-CM1	SUN-3.6K-SG06 LP1-EU-CM2	SUN-4K-SG06 LP1-EU-CM2	SUN-4.6K-SG06 LP1-EU-CM2	SUN-5K-SG06 LP1-EU-CM2	SUN-6K-SG06 LP1-EU-CM2	
<b>Battery Input Data</b>								
Battery Type	Lead-acid or Lithium-ion							
Battery Voltage Range (V)	20-30	40-60						
Max. Charging/Discharging Current (A)	140	70	90	95	120	120	135	
Charging Strategy for Li-ion Battery	Self-adaption to BMS							
Number of Battery Input	1							
<b>PV String Input Data</b>								
Max. PV access power (W)	6000	6000	7200	8000	9200	10000	12000	
Max. PV Input Power (W)	4800	4800	5760	6400	7360	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	
<b>AC Input/Output Data</b>								
Rated AC Input/Output Active Power (W)	3000	3000	3600	4000	4600	5000	6000	
Max. AC Input/Output Apparent Power (VA)	3300	3300	3960	4400	4600	5500	6600	
Rated AC Input/Output Current (A)	13.7/13.1	13.7/13.1	16.4/15.7	18.2/17.4	21/20	22.8/21.8	27.3/26.1	
Max. AC Input/Output Current (A)	15/14.4	15/14.4	18/17.3	20/19.2	21/20	25.0/24.0	30/28.7	
Max. Continuous AC Passthrough (grid to load) (A)	50							
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							
<b>Efficiency</b>								
Max. Efficiency	97.6%							
Euro Efficiency	96.5%							
MPPT Efficiency	>99%							
<b>Equipment Protection</b>								
Integrated	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), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection							
Surge Protection Level	TYPE II(DC), TYPE II(AC)							
<b>Interface</b>								
LCD/LED Display	LCD							
Communication Interface	WIFI, RS485, CAN							
<b>General Data</b>								
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating							
Permissible Ambient Humidity	0-100%							
Permissible Altitude	3000m							
Noise (dB)	<45							
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)	310×460×218 (Excluding Connectors and Brackets)							
Weight (kg)	15.6							
Type of Cooling	Natural Cooling							
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy							
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							