

# Single Phase Hybrid Inverter

SUN-7/7.6/8/10/12K-SG06LP1-EU-CM3



## 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 250A
- Support storing energy from diesel generator

Model	SUN-7K-SG06 LP1-EU-CM3	SUN-7.6K-SG06 LP1-EU-CM3	SUN-8K-SG06 LP1-EU-CM3	SUN-10K-SG06 LP1-EU-CM3	SUN-12K-SG06 LP1-EU-CM3
<b>Battery Input Data</b>					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max. Charging/Discharging Current (A)	175	185	185	220	250
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)	14000	15200	16000	20000	24000
Max. PV Input Power (W)	11200	12160	12800	16000	19200
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)	36+18+18				36+36+18
Max. Input Short-Circuit Current (A)	54+27+27				54+54+27
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+1+1				3/2+2+1
<b>AC Input/Output Data</b>					
Rated AC Input/Output Active Power (W)	7000	7600	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	7700	8360	8800	11000	13200
Rated AC Input/Output Current (A)	31.9/30.5	34.6/33.1	36.4/34.8	45.5/43.5	54.6/52.2
Max. AC Input/Output Current (A)	35.0/33.5	38/36.4	40/38.3	50/47.9	60/57.4
Max. Continuous AC Passthrough (grid to load) (A)	70				
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) (optional), 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)	340×580×234 (Excluding Connectors and Brackets)				
Weight (kg)	24.6			24.9	
Type of Cooling	Intelligent Air 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				