

Single Phase Hybrid Inverter

SUN-6K-SG06LP1-EU-BM2



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-6K-SG06
LP1-EU-BM2

Battery Input Data

Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40-60
Max. Charging/Discharging Current (A)	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)	12000
Max. PV Input Power (W)	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
Max. Input Short-Circuit Current (A)	27+27
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1

AC Input/Output Data

Rated AC Input/Output Active Power (W)	6000
Max. AC Input/Output Apparent Power (VA)	6600
Rated AC Input/Output Current (A)	27.3/26.1
Max. AC Input/Output Current (A)	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

Efficiency

Max. Efficiency	97.6%
Euro Efficiency	96.5%
MPPT Efficiency	>99%

Equipment Protection

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)

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	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