

Single Phase Hybrid Inverter

SUN-3.6/5/6K-SG03LP1-EU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system

16

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

135

Max. charging/discharging current of 135A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Technical Data

Model	SUN-3.6K-SG03LP1-EU		SUN-5K-SG03LP1-EU	SUN-6K-SG03LP1-EU
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	90	120	135	
Max. Discharging Current (A)	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)	7200	10000	12000	
Max. PV Input Power (W)	4680	6500	7800	
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)	13+13			
Max. Input Short-Circuit Current (A)	17+17			
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	3600	5000	6000	
Max. AC Input/Output Apparent Power (VA)	3960	5500	6600	
Rated AC Input/Output Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	
Max. AC Input/Output Current (A)	18/17.2	25/23.9	30/28.7	
Max. Continuous AC Passthrough (grid to load) (A)	35		40	
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/Range (V)	220/230 0.85Un-1.1Un			
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65			
Grid Connection Form	L+N+PE			
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 Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
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			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)			
Weight (kg)	25			
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			