

Single Phase Hybrid Inverter

SUN-5/6K-SG05LP1-EU-SM2



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

Deye

Stock Code: 605117.SH

Model	SUN-5K-SG05LP1-EU-SM2	SUN-6K-SG05LP1-EU-SM2
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	120	135
Max. Discharging Current (A)	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)	10000	12000
Max. PV Input Power (W)	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	
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)	5000	6000
Max. AC Input/Output Apparent Power (VA)	5500	6600
Rated AC Input/Output Current (A)	22.7/21.7	27.3/26.1
Max. AC Input/Output Current (A)	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 ()	-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)	366×589.5×237 (Excluding Connectors and Brackets)	
Weight (kg)	26.8	
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	