




Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8/10K-SG05LP1-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
- 190** Max. charging/discharging current of 190A
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Model	SUN-3.6K-SG05	SUN-5K-SG05	SUN-6K-SG05	SUN-7K-SG05	SUN-7.6K-SG05	SUN-8K-SG05	SUN-10K-SG05
	LP1-EU	LP1-EU	LP1-EU	LP1-EU	LP1-EU	LP1-EU	LP1-EU
Battery Input Data							
Battery Type	Lead-acid or Lithium-ion						
Battery Voltage Range (V)	40-60						
Max. Charging Current (A)	90	120	135	175	190	190	210
Max. Discharging Current (A)	90	120	135	175	190	190	210
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	14000	15200	16000	20000
Max. PV Input Power (W)	5760	8000	9600	11200	12160	12800	16000
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			26+26			
Max. Input Short-Circuit Current (A)	17+17			34+34			
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+2			
AC Input/Output Data							
Rated AC Input/Output Active Power (W)	3600	5000	6000	7000	7600	8000	10000
Max. AC Input/Output Apparent Power (VA)	3960	5500	6600	7700	8360	8800	11000
Rated AC Input/Output Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	31.9/30.5	34.5/33	36.4/34.8	45.5/43.5
Max. AC Input/Output Current (A)	18/17.2	25/23.9	30/28.7	35/33.5	38/36.3	40/38.3	50/47.9
Max. Continuous AC Passthrough (grid to load) (A)	35		40	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/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)	330×580×232 (Excluding Connectors and Brackets)						
Weight (kg)	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, G98, G99, VDE-AR-N 4105						
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						