

# Single Phase Hybrid Inverter

SUN-8K-SG05LP1-AU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



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



Max. charging/discharging current of 190A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

**Deye**

Stock Code: 605117.SH

Model	
SUN-8K-SG05LP1-AU	
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40-60
Max. Charging Current (A)	190
Max. Discharging Current (A)	190
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
Number of Battery Input	1
PV String Input Data	
Max. DC Input Power (W)	12000
Rated PV Input Voltage (V)	500
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150-425
Rated DC Input Voltage(V)	370
Max. Operating PV Input Current (A)	26+26
Max. Input Short-Circuit Current (A)	34+34
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2
AC Output Data	
Rated AC Output Active Power (W)	8000
Max AC Output Active Power (W)	8000
AC Output Rated Current (A)	34.8
Max. AC Output Current (A)	34.8
Max. Continuous AC Passthrough (A)	50
Peak Power (off grid)	2 time of rated power, 10 S
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz
Grid Connection Form	L+N+PE
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% In
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	99.90%
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
Over Voltage Category	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 dB
Weight (kg)	24.9
Cabinet size (mm)	330W x 580H x232D (Excluding connectors and brackets)
Protection Degree	IP65
Type of Cooling	Intelligent Air Cooling
Warranty	10 Years
Grid Regulation	AS/NZS 4777.2
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2