

# Hybrid Inverter

SUN- 12 / 14 / 16 K-SG01LP1-EU



Colorful touch LCD, IP65 protection degree



DC couple and 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 290A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

**Deye**

Stock Code: 605117.SH

# Technical Data

Model	SUN-12K-SG01LP1-EU	SUN-14K-SG01LP1-EU	SUN-16K-SG01LP1-EU
<b>Battery Data</b>			
Battery Type	Lead-acid or Li-Ion		
Battery Voltage Range (V)	40~60		
Max. Charging Current (A)	220	250	290
Max. Discharging Current (A)	220	250	290
UPS Power (W)	12000	14000	16000
External Temperature Sensor	Yes		
Charging Curve	3 Stages / Equalization		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
<b>PV String Input Data</b>			
Max. DC Input Power (W)	15600	18200	20800
Max. DC Input Voltage (V)	500		
Start-up Voltage (V)	150		
MPPT Range (V)	150-425		
Rated DC Input Voltage (V)	370		
PV Input Current (A)	26+26	26+26+26	26+26+26
Max. PV ISC (A)	44+44	44+44+44	44+44+44
Number of MPPT / Strings per MPPT	2/2	3/2	3/2
<b>AC Output Data</b>			
Rated AC Output (W)	12000	14000	16000
AC Output Rated Current (A)	52.2	60.9	69.6
Max. Continuous AC Passthrough (A)	100		
Peak Power (off grid)	2 time of rated power, 5 S		
Power Factor	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)		
Grid Type	Single Phase		
DC injection current (mA)	<0.5%1n		
<b>Backup Data</b>			
Backup Power (W)	10000	12000	14000
Backup Rated Current (A)	43.5	52.2	60.9
Backup UPS	6ms Automatic switchover time		
<b>Efficiency</b>			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	99.90%		
PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection			
Integrated	DC Type II/AC Type III		
Output Over Voltage Protection	DC Type II/AC Type III		
<b>Certifications and Standards</b>			
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
<b>General Data</b>			
Operating Temperature Range (°C)	-45~-60°C, >45°C derating		
Cooling	Smart cooling		
Noise (dB)	<30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	51.5		
Size (mm)	464W×798.4H×300D		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 years		
<b>Features</b>			
Max. Number of Parallel (PCS)	16		