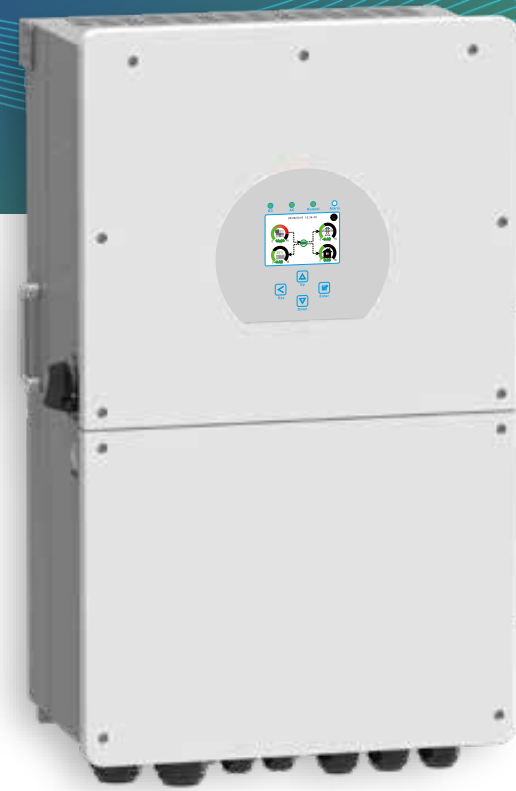








# Hybrid Inverter

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

## 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	12000	12000
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)	125		
MPPT Range (V)	150-425		
Rated DC Input Voltage (V)	370		
PV Input Current (A)	26+26+26		
Max. PV I <sub>SC</sub> (A)	44+44+44		
No. of MPP Trackers	3		
No. of Strings per MPP Tracker	2		
<b>AC Output Data</b>			
Rated AC Output Power (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%I <sub>n</sub>		
<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%		
<b>Integrated</b>			
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			
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)	48.5		
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		