

# Hybrid Inverter

SUN-5/6/7.6/8K-SG01LP1-US

SUN-7.6/8K-SG01LP1-EU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs 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**

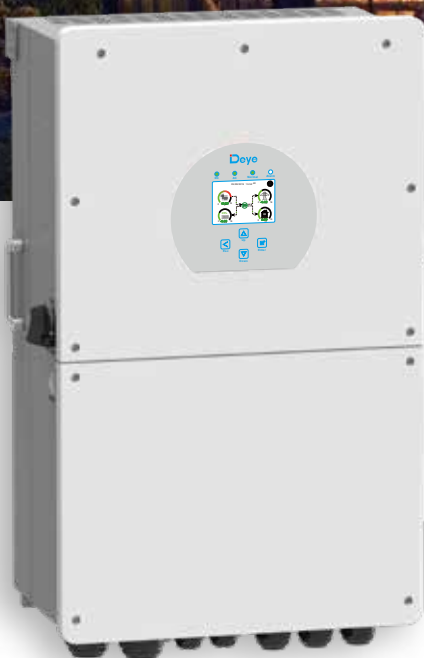
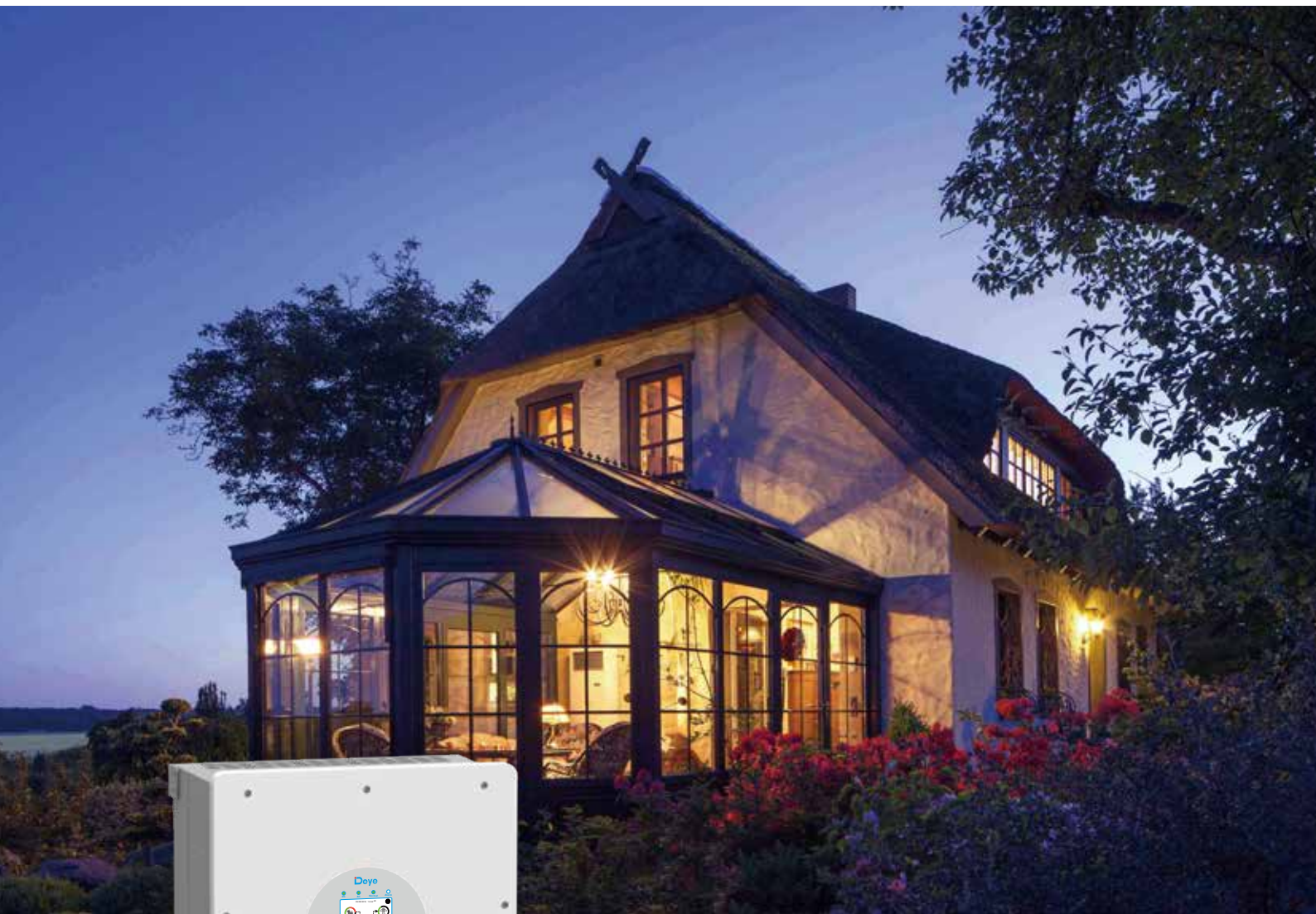
Stock Code: 605117.SH

Model	SUN-5K -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7.6K -SG01LP1-US/EU	SUN-8K -SG01LP1-US/EU		
<b>Battery Input Data</b>						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	120	135	190	190		
Max. Discharging Current (A)	120	135	190	190		
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)	6500	7800	9880	10400		
Rated PV Input Voltage (V)	370 (125-500)					
Start-up Voltage (V)	125					
MPPT Voltage Range (V)	150-425					
Full Load DC Voltage Range (V)	300-425	200-425				
PV Input Current (A)	13+13	26+13	26+26			
Max. PV I <sub>SC</sub> (A)	22+22	44+22	44+44			
No.of MPP Trackers	2					
No.of Strings per MPP Tracker	1+1	2+1	2+2			
<b>AC Output Data</b>						
Rated AC Output Active Power (W)	5000	6000	7600	8000		
Max AC Output Active Power (W)	5500	6600	8360	8800		
AC Output Rated Current (A)	20.8/24	25/28.8	31.7/36.5	34.5/33	33.3/38.5	36.4/34.8
Max. AC Output Current (A)	22.9/26.4	27.5/31.7	34.8/40.2	38/36.3	36.7/42.3	40/38.3
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					
Power Factor	1					
Output Frequency and Voltage	50 / 60Hz; L1/L2/N(PE) 120/240Vac (split phase), 208Vac (2/3 phase), L/N/PE 220/230Vac (single phase)					
Grid Type	Split Phase; 2/3 phase; Single Phase					
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)					
DC Current Injection	<0.5% I <sub>n</sub>					
<b>Efficiency</b>						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
<b>Protection</b>						
Integrated	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					
Over Voltage Category	DC Type II/AC Type III					
<b>Certifications and Standards</b>						
Grid Regulation	EN 50549, UNE 217002, NRS 097, IEEE 1547.1, SRD V2.0					
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, UL 1741					
<b>General Data</b>						
Operating Temperature Range ( )	-40-60°C, >45°C Derating					
Cooling	Smart Cooling					
Noise (dB)	≤30 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	32					
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 Years (10 Years Optional)					



# Hybrid Inverter

SUN-12/14/16K-SG01LP1-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

290

Max. charging/discharging current of 290A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

**Deye**

Stock Code: 605117.SH

Model	SUN-12K-SG01LP1-EU	SUN-14K-SG01LP1-EU	SUN-16K-SG01LP1-EU
<b>Battery Data</b>			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	220	250	290
Max. Discharging Current (A)	220	250	290
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+2+2		
<b>AC Output Data</b>			
Rated AC Output Active Power (W)	12000	14000	16000
Max AC Output Active Power (W)	13200	15400	17600
Rated AC Output Current (A)	54.5/52.2	63.6/60.9	72.7/69.6
Max AC Output Current (A)	60/57.4	70/67	80/76.5
Max. Continuous AC Passthrough (A)	100		
Peak Power (Off Grid)	2 time of rated power, 10 S		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Power Factor	1		
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac		
Grid Type	Single Phase		
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)		
DC Current Injection	<0.5% I <sub>n</sub>		
<b>Backup Data</b>			
Backup Power (W)	10000	12000	14000
Backup Rated Current (A)	45.5/43.5	54.5/52.2	63.6/60.9
Backup UPS	4ms Automatic switchover time		
<b>Efficiency</b>			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	99.90%		
<b>Protection</b>			
Integrated	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		
Over Voltage Category	DC Type II/AC Type III		
<b>Certifications and Standards</b>			
Grid Regulation	IEC 61727, IEC 62116, AS 4777.2, NRS 097		
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 ( )	-40-60°C, >45°C Derating		
Cooling	Smart Cooling		
Noise (dB)	≤30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	48.5		
Cabinet Size (WxHxD mm)	464×763×282 (Excluding Connectors and Brackets)		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 Years (10 Years Optional)		