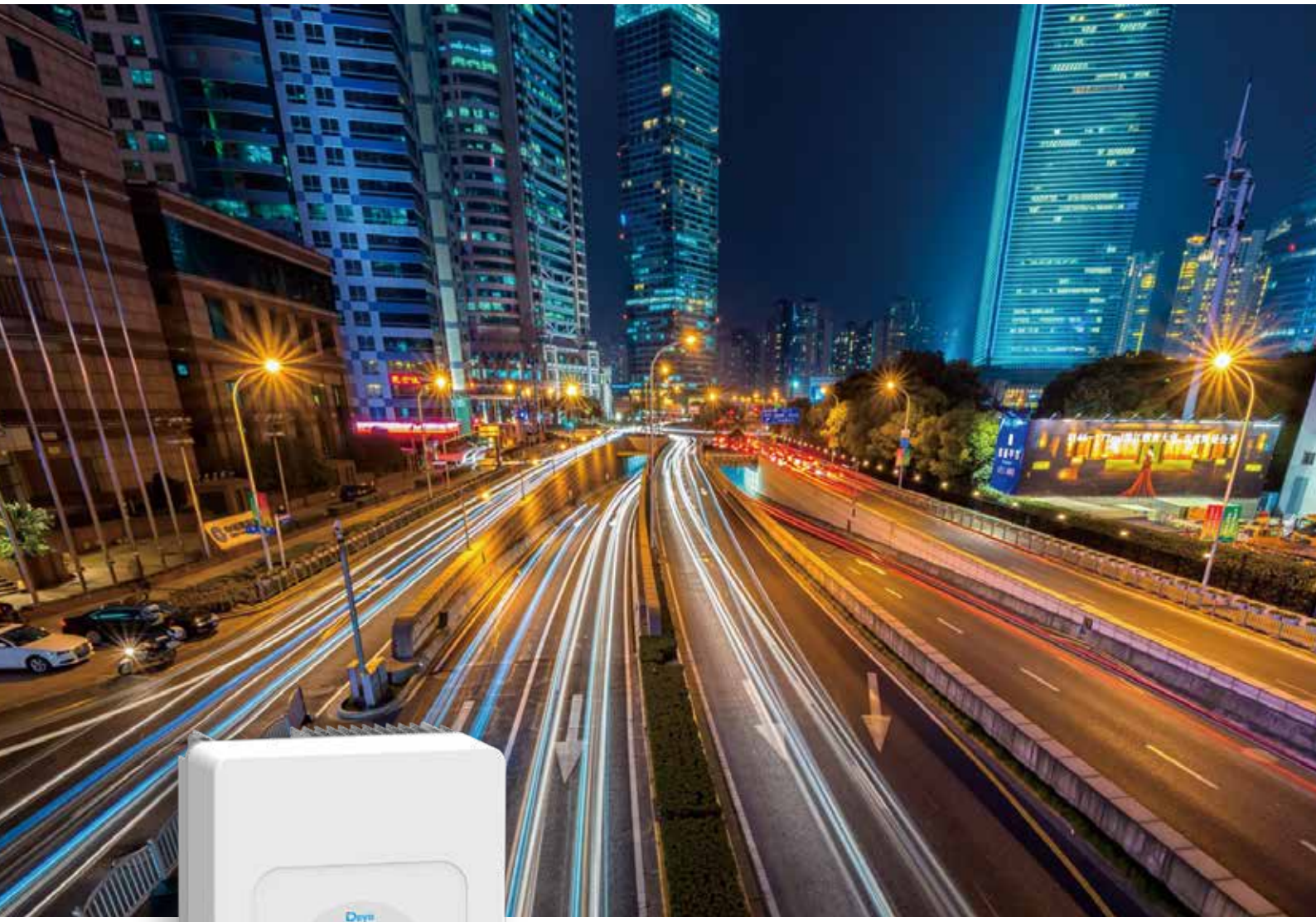
Hybrid Inverter

SUN-3.6/5/6/7.6/8K-SG05LP1-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

Technical Data

Model	SUN-3.6K -SG05LP1-EU	SUN-5K -SG05LP1-EU	SUN-6K -SG05LP1-EU	SUN-7.6K -SG05LP1-EU	SUN-8K -SG05LP1-EU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max. Charging Current (A)	90	120	135	190	190
Max. Discharging Current (A)	90	120	135	190	190
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	4680	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+26	
Max. PV I_{SC}(A)	17+17			34+34	
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1			2+2	
AC Output Data					
Rated AC Output Active Power (W)	3600	5000	6000	7600	8000
Max AC Output Active Power (W)	3960	5500	6600	8360	8800
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	34.5/33	36.4/34.8
Max. AC Output Current (A)	18/17.2	25/23.9	30/28.7	38/36.3	40/38.3
Max. Continuous AC Passthrough (A)	35		40	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; L/N/PE 220/230Vac				
Grid Type	Single Phase				
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	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				
Certifications and Standards					
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (℃)	-40-60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	24				
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				