


SINGLE PHASE HYBRID INVERTER


SUN-5K-SG03LP1


BY **Deye**



6 6 time periods for battery charging/discharging

 Support storing energy from diesel generator

 Colorful touch LCD, IP65 protection degree

 DC couple and AC couple to retrofit existing solar system

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

190 Max. charging/discharging current of 190A

Technical Data

Model		SUN-5K-SG03LP1-EU		
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40~60			
Max. Charging Current (A)	90	120	135	
Max. Discharging Current (A)	90	120	135	
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	
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			
PV Input Current (A)	13+13			
Max. PV _{SC} (A)	17+17			
No. of MPP Trackers	2			
No. of Strings per MPP Tracker	1			
AC Output Data				
Rated AC Output and UPS Power (W)	3600	5000	6000	
Max. AC Output Power (W)	3960	5500	6600	
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	
Max. AC Current (A)	18/17.2	25/23.9	30/28.7	
Max. Continuous AC Passthrough (A)	35			40
Peak Power (off grid)	2 time of rated power, 10 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			
Total Harmonic Distortion (THD)	<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	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			
Certifications and Standards				
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150			
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			
General Data				
Operating Temperature Range(x)	-40~60C, >45C derating			
Cooling	Smart cooling			
Noise (dB)	<30 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	20.5			
Size (mm)	330W x 580H x 232D			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			