



HYBRID SOLAR INVERTER

Single Phase 3.6-6KW, 2 MPPT Hybrid Inverter

SUN-3.6/5/6K-SG03LP1-EU



Screen & IP65
Colorful touch LCD,
IP65 protection degree



Galvanic coupling
DC couple and AC couple to
retrofit existing solar system



Maxmium Current
Max. charging/discharging
current of 190A



Charging/Discharging
6 time periods for battery
charging/discharging



Generator Storing
Support storing energy from
diesel generator

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Model	SUN-3.6K-SG03LP1-EU	SUN-5K-SG03LP1-EU	SUN-6K-SG03LP1-EU
Battery Input Data			
Battery Type	Lead-acid or Li-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 Isc (A)	17+17		
No. of MPP Trackers	2		
No. of Strings per MPP Tracker	1+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 Adjustment Range	0.8 lagging to 0.8 lagging		
Power Factor	1		
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac		
Grid Type	Single Phase		
Total Harmonic Distortion (THD)	<3% (of nominal power)		
DC injection current (mA)	<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	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 (°C)	-40~60C°, >45C° Derating		
Cooling	Smart Cooling		
Noise (dB)	≤30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	20.5		
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 Years (10 Years Optional)		