

Hybrid Inverter

SUN-3.6/5K-SG01/03LP1-EU



Colorful touch LCD,
IP65 protection degree

6

6 time periods for battery
charging/discharging

120

Max. charging/discharging
current of 120A

16

Frequency droop control,
Max.16pcs parallel



DC couple and AC couple to
retrofit existing solar system



Support storing energy from
diesel generator

Model	SUN-3.6K-SG01/03LP1-EU	SUN-5K-SG01/03LP1-EU
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40~60V	
Max. Charging Current (A)	90A	120A
Max. Discharging Current (A)	90A	120A
Charging Curve	3 Stages / Equalization	
External Temperature Sensor	Optional	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
PV String Input Data		
Max. DC Input Power (W)	4680W	6500W
PV Input Voltage (V)	370V (100V~500V)	
MPPT Range (V)	125~425V	
Full Load DC Voltage Range	240~425V	
Start-up Voltage (V)	150V	
PV Input Current (A)	11A+11A	
No. of MPPT Trackers	2	
No. of Strings Per MPPT Tracker	1+1	
AC Output Data		
Rated AC Output and UPS Power (W)	3600W	5000W
Max. AC Output Power (W)	3960W	5500W
Peak Power (off grid)	2 times of rated power, 10 S	
AC Output Rated Current (A)	15.7A	21.7A
Max. AC Current (A)	18A	25A
Max. Continuous AC Passthrough (A)	35A	
Power Factor	0.8 leading to 0.8 lagging	
Output Frequency and Voltage	50/60Hz; 220/230 / 240Vac (single phase)	
Grid Type	Single Phase	
Current Harmonic Distortion	THD<3% (Linear load<1.5%)	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	99.90%	
Protection		
PV Input Lightning Protection	Integrated	
Anti-islanding Protection	Integrated	
PV String Input Reverse Polarity Protection	Integrated	
Insulation Resistor Detection	Integrated	
Residual Current Monitoring Unit	Integrated	
Output Over Current Protection	Integrated	
Output Shorted Protection	Integrated	
Output Over Voltage Protection	Integrated	
Surge protection	DC Type II / AC Type II	
Certifications and Standards		
Grid Regulation	VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727, RD1699: 2011, XP C15-712-3, CEI 0-21	
Safety Regulation	IEC62109-1, IEC62109-2	
EMC	EN61000-6-1, EN61000-6-3	
General Data		
Operating Temperature Range (°C)	-25~60°C, >45°C Derating	
Cooling	Smart cooling	
Noise (dB)	<30 dB	
Communication with BMS	RS485; CAN	
Weight (kg)	20.5	
Size (mm)	330Wx580Hx232D	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 years	

Hybrid Inverter

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



Colorful touch LCD,
IP65 protection degree

6

6 time periods for battery
charging/discharging

190

Max. charging/discharging
current of 190A

16

Frequency droop control,
Max.16pcs parallel



DC couple and AC couple to
retrofit existing solar system



Support storing energy from
diesel generator

Model	SUN-5K-SG01LP1-US	SUN-6K-SG01LP1-US	SUN-7.6K-SG01LP1-US/EU	SUN-8K-SG01LP1-US/EU
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40~60V			
Max. Charging Current (A)	120A	135A	190A	190A
Max. Discharging Current (A)	120A	135A	190A	190A
Charging Curve	3 Stages / Equalization			
External Temperature Sensor	Optional			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	6500W	7800W	9880W	10400W
PV Input Voltage (V)	370V (100V~500V)			
MPPT Range (V)	125V-425V			
Start-up Voltage (V)	150V			
PV Input Current (A)	11A+11A	22A+11A	22A+22A	22A+22A
No.of MPPT Trackers	2			
No.of Strings Per MPPT Tracker	1+1	2+1	2+2	2+2
AC Output Data				
Rated AC Output and UPS Power (W)	5000W	6000W	7600W	8000W
Max. AC Output Power (W)	5500W	6600W	8360W	8800W
Peak Power (off grid)	2 times of rated power, 10 S			
AC Output Rated Current (A)	20.8A	25A	31.7A / 33A	33.4A / 35A
Max. AC Current (A)	22.9A	27.5A	34.9A / 36.3A	36.7A / 38.5A
Max. Continuous AC Passthrough (A)	35A	40A	50A	50A
Output Frequency and Voltage	50 / 60Hz; 120 / 240Vac (split phase), 208Vac (2 / 3 phase), 230Vac (single phase)			
Grid Type	Split phase; 2 / 3 phase; Single Phase			
Current Harmonic Distortion	THD<3% (Linear load<1.5%)			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
Protection				
PV Input Lightning Protection	Integrated			
Anti-islanding Protection	Integrated			
PV String Input Reverse Polarity Protection	Integrated			
Insulation Resistor Detection	Integrated			
Residual Current Monitoring Unit	Integrated			
Output Over Current Protection	Integrated			
Output Shorted Protection	Integrated			
Output Over Voltage Protection	Integrated			
Surge protection	DC Type II / AC Type II			
Certifications and Standards				
Grid Regulation	UL1741, IEEE1547, RULE21, VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727			
Safety Regulation	IEC62109-1, IEC62109-2			
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B			
General Data				
Operating Temperature Range (°C)	-25~60°C, >45°C Derating			
Cooling	Smart cooling			
Noise (dB)	<30 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	32			
Size (mm)	420W×670H×233D			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			

Three Phase Hybrid Inverter

SUN- 8 / 10 / 12 K-SG01LP3





48 48V low voltage battery, transformer isolation design

6 6 time periods for battery charging/discharging

240 Max. charging/discharging current of 240A

16 Frequency droop control, Max.16pcs parallel

 DC couple and AC couple to retrofit existing solar system

 Support storing energy from diesel generator

Model	SUN-8K-SG01LP3	SUN-10K-SG01LP3	SUN-12K-SG01LP3
Battery Input Data			
Battery Type	Lead-acid or Li-Ion		
Battery Voltage Range (V)	40~60V		
Max. Charging Current (A)	190A	210A	240A
Max. Discharging Current (A)	190A	210A	240A
Charging Curve	3 Stages / Equalization		
External Temperature Sensor	Optional		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	10400W	13000W	15600W
PV Input Voltage (V)	450V (140V~800V)		
MPPT Range (V)	140V-700V		
Start-up Voltage (V)	160V		
PV Input Current (A)	12.5A+12.5A	25A+12.5A	25A+12.5A
No.of MPPT Trackers	2		
No.of Strings Per MPPT Tracker	1+1	2+1	2+1
AC Output Data			
Rated AC Output and UPS Power (W)	8000W	10000W	12000W
Max. AC Output Power (W)	8800W	11000W	13200W
Peak Power (off grid)	2 times of rated power, 10 S		
AC Output Rated Current (A)	11.6A	14.5A	17.4A
Max. AC Current (A)	12.8A	16A	19.1A
Max. Continuous AC Passthrough (A)	60A	60A	60A
Output Frequency and Voltage	50/60Hz; 230/400Vac (Three phase)		
Grid Type	Three Phase		
Current Harmonic Distortion	THD<3% (Linear load<1.5%)		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	97.00%		
MPPT Efficiency	99.90%		
Protection			
PV Input Lightning Protection	Integrated		
Anti-islanding Protection	Integrated		
PV String Input Reverse Polarity Protection	Integrated		
Insulation Resistor Detection	Integrated		
Residual Current Monitoring Unit	Integrated		
Output Over Current Protection	Integrated		
Output Shorted Protection	Integrated		
Output Over Voltage Protection	Integrated		
Surge protection	DC Type II / AC Type II		
Certifications and Standards			
Grid Regulation	UL1741, IEEE1547, RULE21, VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727		
Safety Regulation	IEC62109-1, IEC62109-2		
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B		
General Data			
Operating Temperature Range (°C)	-25~60°C, >45°C Derating		
Cooling	Smart cooling		
Noise (dB)	<30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	45		
Size (mm)	420Wx656Hx281D		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 years		