Three Phase Hybrid Inverter

SUN-3/4/5/6K-SG05LP3-EU-SM2

- 100% unbalanced output, each phase; Max. output up to 50% rated power
- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 135A
- 48V low voltage battery, transformer isolation design
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

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Stock Code: 605117.SH

Technical Data

Model	SUN-3K-SG05 LP3-EU-SM2	SUN-4K-SG05 LP3-EU-SM2	SUN-5K-SG05 LP3-EU-SM2	SUN-6K-SG05 LP3-EU-SM2
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	70	95	120	135
Max. Discharging Current (A)	70	95	120	135
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1			
PV String Input Data				
Max. PV Input Power (W)	4500	6000	7500	9000
Max. PV Input Voltage (V)	800			
Start-up Voltage (V)	160			
MPPT Voltage Range (V)	200-650			
Rated PV Input Voltage (V)	550			
Max. Operating PV Input Current (A)	20+20			
Max. Input Short-Circuit Current (A)	30+30			
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/1+1			
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	3000	4000	5000	6000
Max. AC Input/Output Apparent Power (VA)	3300	4400	5500	6600
Rated AC Input/Output Current (A)	4.6/4.4	6.1/5.8	7.6/7.3	9.1/8.7
Max. AC Input/Output Current (A)	5/4.8	6.7/6.4	8.4/8	10/9.6
Max. Three-phase Unbalanced Output Current (A)	6.9/6.6	9.1/8.7	11.4/10.9	13.7/13.1
Max. Continuous AC Passthrough (grid to load) (A)	45			
Peak Power (off-grid) (W)	2 times of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un			
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65			
Grid Connection Form	3L+N+PE			
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<0.5% In			
Efficiency				
Max. Efficiency	97.6%			
Euro Efficiency	97.0%			
MPPT Efficiency	>99%			
Equipment Protection				
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
General Data				
Operating Temperature Range (℃)	-40 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	3000m			
Noise (dB)	≤55			
Ingress Protection(IP) Rating	IP 65			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	386×660×253 (Excluding Connectors and Brackets)			
Weight (kg)	35.2			
Type of Cooling	Intelligent Air Cooling			
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy			
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			

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