Single Phase Hybrid Inverter

SUN-7/7.6/8K-SG05LP1-EU-SM2





- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- 16 — Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 190 — Max. charging/discharging current of 190A
- 6 — 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

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Tesla Solar SA

Stock Code: 605117.SH

Technical Data

Model	SUN-7K-SG05LP1-EU-SM2	SUN-7.6K-SG05LP1-EU-SM2	SUN-8K-SG05LP1-EU-SM2
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	175	190	190
Max. Discharging Current (A)	175	190	190
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
PV String Input Data			
Max. PV Access Power (W)	14000	15200	16000
Max. PV Input Power (W)	11200	12160	12800
Max. PV Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Voltage Range (V)	150-425		
Rated PV Input Voltage (V)	370		
Max. Operating PV Input Current (A)	26+26		
Max. Input Short-Circuit Current (A)	34+34		
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2		
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	7000	7600	8000
Max. AC Input/Output Apparent Power (VA)	7700	8360	8800
Rated AC Input/Output Current (A)	31.9/30.5	34.6/33.1	36.4/34.8
Max. AC Input/Output Current (A)	35/33.5	38/36.4	40/38.3
Max. Continuous AC Passthrough (grid to load) (A)	50		
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)	220/230 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65		
Grid Connection Form	L+N+PE		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
Efficiency			
Max. Efficiency	97.6%		
Euro Efficiency	96.5%		
MPPT Efficiency	>99%		
Equipment Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, 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	2000m		
Noise (dB)	<30		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (WxHxD mm)	366×589.5×237 (Excluding Connectors and Brackets)		
Weight (kg)	26.8		
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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