Split Phase Hybrid Inverter

SUN-5/6/7.6/8K-SG02LP2-US-AM2
SUN-10/12K-SG02LP2-US-AM3

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 250A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Technical Data

Model	SUN-5K-SG02 LP2-US-AM2	SUN-6K-SG02 LP2-US-AM2	SUN-7.6K-SG02 LP2-US-AM2	SUN-8K-SG02 LP2-US-AM2	SUN-10K-SG02 LP2-US-AM3	SUN-12K-SG02 LP2-US-AM3
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	120	135	190	190	220	250
Max. Discharging Current (A)	120	135	190	190	220	250
Charging Strategy for Li-ion Battery	Self-adaption to BMS					
Number of Battery Input	1					
PV String Input Data						
Max. PV Input Power (W)	7500	9000	11400	12000	15000	18000
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)	20+20		26+26		26+26+26	
Max. Input Short-Circuit Current (A)	44+44		44+44		44+44+44	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2				3/2+2+2	
AC Input/Output Data						
Rated AC Input/Output Active Power (W)	5000	6000	7600	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	5000	6000	7600	8000	10000	12000
Rated AC Input/Output Current (A)	20.9	25	31.7	33.4	41.7	50
Max. AC Input/Output Current (A)	20.9	25	31.7	33.4	41.7	50
Max. Continuous AC Passthrough (grid to load) (A)	35	40	50		60	
Peak Power (off-grid) (W)	2 times of rated power, 10s					
Power Factor Adjustment Range	0.9-1					
Rated Input/Output Voltage/Range (V)	120/240; 208 0.88Un＜U＜1.1Un					
Rated Input/Output Grid Frequency/Range(Hz)	60/55-65					
Grid Connection Form	2L+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)	<45					
Ingress Protection(IP) Rating	TYPE 3R					
Inverter Topology	Non-Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)					
Weight (kg)	35.6					
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	IEEE 1547.1, SRD V2.0					
Safety / EMC Standard	FCC, UL 1741					

Deye
Ningbo Deye Inverter Technology Co., Ltd.
Address: No. 26 South YongJiang Road, Daqi, Beilun, NingBo, Zhejiang, China. | Tel: +86 (0)574 86228841 | E-mail: market@deye.com.cn