

Split Phase Hybrid Inverter

SUN-7.6/8K-SG02LP2-US-AM2-P

SUN-10/12K-SG02LP2-US-AM3-P



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-7.6K-SG02 LP2-US-AM2-P	SUN-8K-SG02 LP2-US-AM2-P	SUN-10K-SG02 LP2-US-AM3-P	SUN-12K-SG02 LP2-US-AM3-P
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	190	190	220	250
Max. Discharging Current (A)	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)	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)	32+32		32+32+32	
Max. Input Short-Circuit Current (A)	60+60		60+60+60	
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)	7600	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	7600	8000	10000	12000
Rated AC Input/Output Current (A)	31.7	33.4	41.7	50
Max. AC Input/Output Current (A)	31.7	33.4	41.7	50
Max. Continuous AC Passthrough (grid to load) (A)	50		60	
Peak Power (off-grid) (W)	2 times of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8lagging			
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 Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection			
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 (°C)	-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			