

Split Phase Hybrid Inverter

SUN-8/9/10/12/15K-SG02LP2-US-AM2



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 290A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Technical Data

Model	SUN-8K-SG02 LP2-US-AM2	SUN-9K-SG02 LP2-US-AM2	SUN-10K-SG02 LP2-US-AM2	SUN-12K-SG02 LP2-US-AM2	SUN-15K-SG02 LP2-US-AM2
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60	40-60	40-60	40-60	40-60
Max. Charging Current (A)	180	180	275	275	275
Max. Discharging Current (A)	180	180	275	275	275
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max. PV Input Power (W)	10400	11700	13000	16500	19500
Max. PV Input Voltage (V)	500				
Start-up Voltage (V)	150				
MPPT Voltage Range (V)	175-425				
Rated PV Input Voltage (V)	370				
Max. Operating PV Input Current (A)	26+26				26+26+26
Max. Input Short-Circuit Current (A)	44+44				44+44+44
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/2+2				3/2+2+2
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	8000	9000	10000	12000	15000
Max. AC Input/Output Apparent Power (VA)	8000	9000	10000	12000	15000
Rated AC Input/Output Current (A)	33.4	37.5	47.1	50	62.5
Max. AC Input/Output Current (A)	33.4	37.5	47.1	50	62.5
Max. Continuous AC Passthrough (grid to load) (A)	200				
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)	120/240;208 0.88Un<U<1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	60Hz/55Hz-65Hz				
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 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℃, >45℃ 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 (W×H×D mm)	501×807×300 (Excluding Connectors and Brackets)				
Weight (kg)	51.5				
Type of Cooling	Natural 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				