

# Single Phase Hybrid Inverter

SUN-10/12K-SG02LP1-AU-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-10K-SG02LP1-AU-AM3	SUN-12K-SG02LP1-AU-AM3
<b>Battery Input Data</b>		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	220	250
Max. Discharging Current (A)	220	250
Charging Strategy for Li-ion Battery	Self-adaption to BMS	
Number of Battery Input	1	
<b>PV String Input Data</b>		
Max. PV access power(W)	20000	24000
Max. PV Input Power (W)	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)	26+26+26	
Max. Input Short-Circuit Current (A)	44+44+44	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2	
<b>AC Input/Output Data</b>		
Rated AC Input/Output Active Power (W)	9999	12000
Max. AC Input/Output Apparent Power (VA)	9999	12000
Rated AC Input/Output Current (A)	43.5	52.2
Max. AC Input/Output Current (A)	43.5	52.2
Max. Continuous AC Passthrough (grid to load) (A)	60	
Peak Power (off-grid) (W)	2 times of rated power, 10s	
Power Factor Adjustment Range	0.8 leading-0.8lagging	
Rated Input/Output Voltage/Range (V)	230V/240V 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range(Hz)	50Hz/45Hz-55Hz	
Grid Connection Form	L+N+PE	
Total Current Harmonic Distortion THDi	<3% (of nominal power)	
DC Injection Current	<0.5% In	
<b>Efficiency</b>		
Max. Efficiency	97.6%	
Euro Efficiency	96.5%	
MPPT Efficiency	>99%	
<b>Equipment Protection</b>		
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Insulation Impedance Detection, Arc Fault Circuit Interrupter (optional), DC Switch, Anti-islanding Protection(Active Frequency shift) , Residual Current Detection	
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
<b>Interface</b>		
Communication Interface	WIFI,RS485,CAN	
LCD/LED Display	LCD	
<b>General Data</b>		
Operating Temperature Range (°C)	-40°C to +60°C, >45°C Derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude	2000m	
Noise (dB)	<45 dB	
Ingress Protection(IP) Rating	IP 65	
Protection Level	Class I	
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	10 Years	
Grid Regulation	AS/NZS 4777.2	
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	