Single Phase Hybrid Inverter

SUN-10/12K-SG02LP1-AU-AM3

- 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
- 250 — Max. charging/discharging current of 250A
- 6 — 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Technical Data

Model	SUN-10K-SG02 LP1-AU-AM3	SUN-12K-SG02 LP1-AU-AM3
Battery Input Data		
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	
PV String Input Data		
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	
AC Input/Output Data		
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)	2 time of rated power, 10 S	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz	
Grid Connection Form	L+N+PE	
Total Current Harmonic Distortion THDi	<3% (of nominal power)	
DC Current Injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	>99%	
Protection		
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)	
Interface		
Communication Interface	RS485/CAN	
LCD/LED Display	LCD	
General Data		
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude	2000m	
Noise (dB)	<45 dB	
Inverter Topology	Non-Isolated	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Weight (kg)	35.6	
Cabinet size (mm)	420W×670H×233 D（Excluding connectors and brackets）	
Protection Degree	IP65	
Protection Level	Class I	
Type of Cooling	Intelligent Air Cooling	
Warranty	10 Year	
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	

Deye
Ningbo Deye Inverter Technology Co., Ltd
Add: No.26-30, South Yongjiang Road, Beilun, 315806, Ningbo, China | Tel: 0086-0574-86120560 | E-mail: market@deye.com.cn

Made in China