

Single Phase Hybrid Inverter

SUN-12/14/16K-SG01LP1-AU-AM3



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system

16

Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

290

Max. charging/discharging current of 290A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Model	SUN-12K-SG01LP1-AU-AM3	SUN-14K-SG01LP1-AU-AM3	SUN-16K-SG01LP1-AU-AM3
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	220	250	290
Max. Discharging Current (A)	220	250	290
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
Number of Battery Input	2		
PV String Input Data			
Max. PV access power(W)	24000	28000	32000
Max. PV Input Power (W)	18000	21000	24000
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)	12000	14000	16000
Max. AC Input/Output Apparent Power (VA)	12000	14000	16000
Rated AC Input/Output Current (A)	52.2	60.9	69.6
Max. AC Input/Output Current (A)	52.2	60.9	69.6
Max. Continuous AC Passthrough (grid to load) (A)	100		
Peak Power (off grid) (W)	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 Harmonics Current Distortion (THDi)	<3%		
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	WIFI,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)	<50 dB		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Weight (kg)	48		
Cabinet Size (W*H*D) [mm]	464 x 763 x282 (Excluding connectors and brackets)		
Ingress Protection(IP) Rating	IP65		
Protection Level	Class I		
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		