

Single Phase Hybrid Inverter

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



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	SUN-14K -SG01LP1-AU	SUN-16K -SG01LP1-AU
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	210	250	290
Max. Discharging Current (A)	210	250	290
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
PV String Input Data			
Max. PV access power(W)	24000	28000	32000
Max. DC Input Power (W)	18000	21000	24000
Rated PV Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Voltage Range (V)	150-425		
Rated DC 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 Output Data			
Rated AC Output Active Power (W)	12000	14000	16000
Max AC Output Active Power (W)	12000	14000	16000
AC Output Rated Current (A)	52.2	60.9	69.6
Max. AC Output Current (A)	52.2	60.9	69.6
Max. Continuous AC Passthrough (A)	100		
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 Harmonics Current Distortion (THDi)	<3% (of nominal power)		
DC Current Injection	<0.5% In		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	99.90%		
Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level		
Over Voltage Category	TYPE II(DC), TYPE II(AC)		
Interface			
Communication Interface	RS485/CAN		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range ()	-40 to +60°C, >45°C derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	2000m		
Noise (dB)	< 50 dB		
Inverter Topology (solar/battery)	Transformerless/ HF Transformer		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Weight (kg)	48		
Cabinet size (mm)	464W x 763H x282D (Excluding connectors and brackets)		
Protection Degree	IP65		
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		