



# Three Phase Hybrid Inverter

SUN-10/12/15K-SG01HP3-US-AM2



- 100** 100% unbalanced output, each phase
-  AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50** Max. charging/discharging current of 50A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

**Deye**

Stock Code: 605117.SH

Model	SUN-10K-SG01HP3 -US-AM2	SUN-12K-SG01HP3 -US-AM2	SUN-15K-SG01HP3 -US-AM2
<b>Battery Input Data</b>			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-500		
Max. Charging Current (A)	50		
Max. Discharging Current (A)	50		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
<b>PV String Input Data</b>			
Max. DC Input Power (W)	13000	15600	19500
Max. DC Input Voltage (V)	550		
Start-up Voltage (V)	180		
MPPT Voltage Range (V)	150-500		
Rated DC Input Voltage (V)	380		
Max. Operating PV Input Current (A)	26+26		
Max. Input Short-Circuit Current (A)	39+39		
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/2+2		
<b>AC Input/Output Data</b>			
Rated AC Input/Output Active Power (W)	10000	12000	15000
Max. AC Input/Output Apparent Power (VA)	10000	12000	15000
Rated AC Input/Output Current (A)	27.8	33.4	41.7
Max. AC Input/Output Current (A)	27.8	33.4	41.7
Max. Three-phase Unbalanced Output Current (A)	30	35	41.7
Max. Continuous AC Passthrough (grid to load) (A)	80		
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)	120/208 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range	60Hz/55Hz-65Hz		
Grid Connection Form	3L+N+PE		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Component of Grid	<0.5% In		
<b>Efficiency</b>			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	>99%		
<b>Equipment Protection</b>			
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)		
<b>Interface</b>			
Communication Interface	WIFI, RS485, CAN		
<b>General Data</b>			
Operating Temperature Range ( )	-40 to +60°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	2000m		
Noise (dB)	≤55		
Ingress Protection(IP) Rating	TYPE3R		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (WxHxD mm)	408×678×247 (Excluding Connectors and Brackets)		
Weight (kg)	30		
Type of Cooling	Intelligent Air 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		