Three Phase Hybrid Inverter

SUN-20/25/30K-SG01HP3-US-BM3/4





Deye

Stock Code: 605117.SH

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

Technical Data

Model	SUN-20K-SG01HP3 -US-BM3	SUN-25K-SG01HP3 -US-BM3	SUN-30K-SG01HP3 -US-BM4
Battery Input Data			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160~500		
Max. Charging Current (A)	50+50		
Max. Discharging Current (A)	50+50		
Number of battery input	2		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	26000	32500	39000
Max. DC Input Voltage (V)	550		
Start-up Voltage (V)	180		
MPPT Range (V)	150-500		
Full Load DC Voltage Range (V)	240-500	300-500	270-500
Rated DC Input Voltage (V)	380		
PV Input Current (A)	36+36+36		36+36+36+36
Max. PV I_{SC} (A)	55+55+55		55+55+55+55
No.of MPP Trackers	3		4
No.of Strings per MPP Tracker	2		2
AC Output Data			
Rated AC Output and UPS Power (W)	20000	25000	30000
Max. AC Output Power (W)	20000	25000	30000
AC Output Rated Current (A)	55.6	69.5	83.4
Max. AC Current (A)	55.6	69.5	83.4
Max. Three-phase Unbalanced Output Current	80	85	90
Max. Continuous AC Passthrough (A)	200		
Peak Power (off grid)	1.5 time of rated power, 10 S		
Generator input/Smart load /AC couple current (A)	55.6 / 200 / 55.6	69.5 / 200 / 69.5	83.4 / 200 / 83.4
Power Factor	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	60Hz; 3L+N+PE 120/208Vac		
Grid Type	Three Phase		
Total Harmonic Distortion (THD)	<3% (of nominal power)		
DC current injection	<0.5% In		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	97.00%		
MPPT Efficiency	99.90%		
Protection			
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection		
Output Over Voltage Protection	DC Type II/AC Type III		
Certifications and Standards			
Grid Regulation	IEEE 1547-2018, IEEE 1547.1-2020, UL 1699B, UL 1998		
Safety EMC / Standard	UL 1741, FCC		
General Data			
Operating Temperature Range (℃)	-40~60℃, >45℃ derating		
Cooling	Smart cooling		
Noise (dB)	≤65 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	75		
Size (mm)	527W×894H×294D		
Protection Degree	TYPE 3R		
Installation Style	Wall-mounted		
Warranty	5 years		

*Note: The function of Multiple units work in parallel mode will be avaiable in Q1 2023