Three Phase Hybrid Inverter

SUN-29.9/30/35K-SG01HP3-EU-BM3
SUN-40/50K-SG01HP3-EU-BM4





- 100% unbalanced output, each phase
- AC couple to retrofit existing solar system
- Max. 10 pcs 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

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Stock Code: 605117.SH

Technical Data

Model	SUN-29.9K-SG01HP3 -EU-BM3	SUN-30K-SG01HP3 -EU-BM3	SUN-35K-SG01HP3 -EU-BM3	SUN-40K-SG01HP3 -EU-BM4	SUN-50K-SG01HP3 -EU-BM4
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-800				
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)	38870	39000	45500	52000	65000
Max. DC Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Range (V)	150-850				
Full Load DC Voltage Range (V)	360-850	360-850	420-850	360-850	450-850
Rated DC Input Voltage (V)	600				
PV Input Current (A)	36+36+36	36+36+36	36+36+36	36+36+36+36	
Max. PV I_{SC}(A)	55+55+55	55+55+55	55+55+55	55+55+55+55	
No.of MPP Trackers	3			4	
No.of Strings per MPP Tracker	2+2+2			2+2+2+2	
AC Output Data					
Rated AC Output Active Power (W)	29900	30000	35000	40000	50000
Max. AC Output Active Power (W)	29900	33000	38500	44000	55000
AC Output Rated Current (A)	45.4/43.4	45.5/43.5	53.1/50.8	60.7/58	75.8/72.5
Max. AC Output Current (A)	45.4/43.4	50/47.8	58.4/55.8	66.7/63.8	83.4/79.7
Max. Three-phase Unbalanced Output Current (A)	60	60	60	70	83.3
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)	45.4 / 200 / 45.4	45.5 / 200 / 45.5	53.1 / 200 / 53.1	60.7 / 200 / 60.7	75.8 / 200 / 75.8
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
Total Harmonics Current Distortion (THDi)	<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	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, Arc Fault Circuit Interruption (AFCI optional)				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤65 dB				
Communication with BMS	CAN				
Weight (kg)	80				
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				

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