



Three Phase Hybrid Inverter

SUN-29.9/30/35/40/50 K-SG01HP3-EU-BM3/4



Deye

Stock Code: 605117.SH

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

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	360-850	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				
AC Output Data					
Rated AC Output and UPS Power (W)	29900	30000	35000	40000	50000
Max. AC Output 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 Rated 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	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	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 Harmonic Distortion (THD)	<3% (of nominal power)				
DC current Injection	<0.5% I _n				
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	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0.21, EN50549-1, G98, G99, C10 11, UNE217002, NBR16149/NBR16150				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (°C)	-40~60°C, >45°C derating				
Cooling	Smart cooling				
Noise (dB)	<65 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	75				
Size (mm)	527W×894H×294D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				

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