

# Three Phase Hybrid Inverter



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



- 100% unbalanced output, each phase; Max. output up to 50% rated power
- DC couple and 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

**Deye**

Stock Code: 605117.SH

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
<b>Battery Input Data</b>					
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				
<b>PV String Input Data</b>					
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				
Rated DC Input Voltage (V)	360-850	360-850	360-850	360-850	450-850
PV Input Current (A)	600				
Max. PV I <sub>sc</sub> (A)	36+36+36	36+36+36	36+36+36	36+36+36+36	
No. of MPP Trackers	55+55+55	55+55+55	55+55+55	55+55+55+55	
No. of Strings per MPP Tracker	3			4	
	2+2+2			2+2+2+2	
<b>AC Output Data</b>					
Rated AC Output Active Power (W)	29900				
Max AC Output Active Power (W)	29900	30000	35000	40000	50000
AC Output Rated Current (A)	29900	33000	38500	44000	55000
Max. 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. Three-phase Unbalanced Output Current (A)	45.4/43.4	50/47.8	58.4/55.8	66.7/63.8	83.4/79.7
Max. Continuous AC Passthrough (A)	60	60	60	70	83.3
Peak Power (Off Grid)	200				
Generator Input/Smart Load /AC Couple Current (A)	1.5 time of rated power, 10 S				
Power Factor Adjustment Range	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
Output Frequency and Voltage	0.8 leading to 0.8 lagging				
Grid Type	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Total Harmonic Distortion (THD)	Three Phase				
DC Current Injection	<3% (of nominal power)				
<b>Efficiency</b>	<0.5% In				
Max. Efficiency					
Euro Efficiency	97.60%				
MPPT Efficiency	97.00%				
<b>Protection</b>	99.90%				
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				
Over Voltage Category	DC Type II/AC Type III				
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				
Operating Temperature Range (					
Warranty					

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

