

# Technical Data

Model	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)	65000
Max. DC Input Voltage (V)	1000
Start-up Voltage (V)	180
MPPT Range (V)	150-850
Full Load DC Voltage Range (V)	450-850
Rated DC Input Voltage (V)	600
PV Input Current (A)	36+36+36+36
Max. PV I <sub>SC</sub> (A)	55+55+55+55
No.of MPP Trackers	4
No.of Strings per MPP Tracker	2
<b>AC Output Data</b>	
Rated AC Output and UPS Power (W)	50000
Max. AC Output Power (W)	55000
AC Output Rated Current (A)	75.8/72.5
Max. AC Output Rated Current (A)	83.4/79.7
Max. Three-phase Unbalanced Output Current	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)	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 <sub>n</sub>
<b>Efficiency</b>	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.90%
<b>Protection</b>	
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
<b>Certifications and Standards</b>	
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
<b>General Data</b>	
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