Technical Data

Model	SUN-12K-SG04LP3-EU
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	240
Max. Discharging Current (A)	240
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
PV String Input Data	
Max. DC Input Power (W)	15600
Rated PV Input Voltage (V)	550 (160~800)
Start-up Voltage (V)	160
MPPT Voltage Range (V)	200-650
Full Load DC Voltage Range (V)	350-650
PV Input Current (A)	26+13
Max. PV I_{SC} (A)	34+17
No.of MPP Trackers	2
No.of Strings per MPP Tracker	2+1
AC Output Data	
Rated AC Output Active Power (W)	12000
Max AC Output Active Power (W)	13200
AC Output Rated Current (A)	18.2/17.4
Max AC Output Current (A)	20/19.1
Max. Three-phase Unbalanced Output Current (A)	27.3/26.1
Max Output short circuit current (A)	75
Max. Continuous AC Passthrough (A)	45
Peak Power (off grid)	2 time of rated power, 10 S
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% 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	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 (℃)	-40~60°C, >45°C derating
Cooling	Smart cooling
Noise (dB)	≤45 dB
Communication with BMS	RS485; CAN
Weight (kg)	33.6
Size (mm)	422W x 702H x281D
Protection Degree	IP65
Installation Style	Wall-mounted