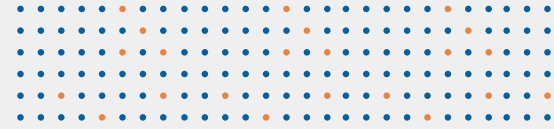


# THREE PHASE HYBRID INVERTER


## SUN-12K-SG04LP3

BY **Deye**




**CERTIFICATE  
OF AUTHORITY**

**6** 6 time periods for battery charging/discharging

 Support storing energy from diesel generator

**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

**240** Max. charging/discharging current of 240A

**48** 48V low voltage battery, transformer isolation design

# Technical Data

Model		SUN-12K-SG04LP3				
<b>Battery Input Data</b>						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40~60					
Max. Charging Current (A)	120	150	190	210	240	
Max. Discharging Current (A)	120	150	190	210	240	
External Temperature Sensor	Yes					
Charging Curve	3 Stages / Equalization					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
<b>PV String Input Data</b>						
Max. DC Input Power (W)	6500	7800	10400	13000	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)	13+13			26+13		
Max. PV ISC(A)	17+17			34+17		
No.of MPP Trackers	2					
No.of Strings per MPP Tracker	1		2+1			
<b>AC Output Data</b>						
Rated AC Output Active Power (W)	5000	6000	8000	10000	12000	
Max AC Output Active Power (W)	5500	6600	8800	11000	13200	
AC Output Rated Current (A)	7.6/7.2	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4	
Max AC Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/15.9	20/19.1	
Max. Three-phase Unbalanced Output Current (A)	11.4/10.9	13.6/13	18.2/17.4	22.7/21.7	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					
<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 (••)	-40~60 , >45 derating					
Cooling	Smart cooling					
Noise (dB)	≤45 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	33.6					
Size (mm)	422W x 702H x 281D					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 years					