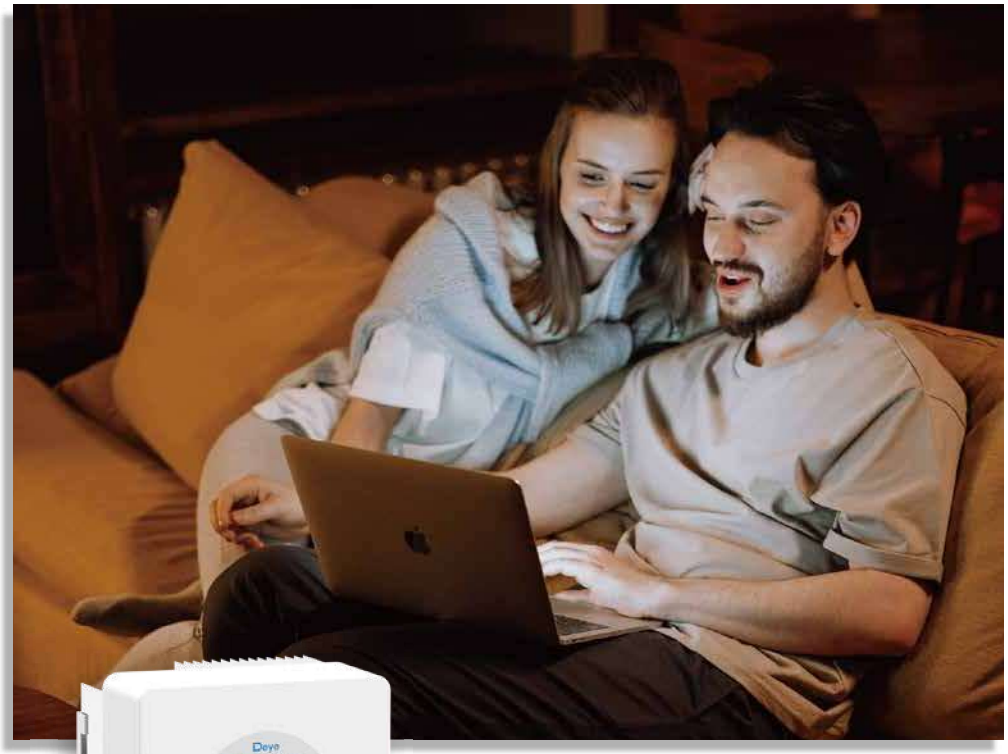
Single Phase Hybrid Inverter

SUN- 3/3.6/5/6K-SG04LP1-AU



- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 135A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-3K -SG04LP1-24-AU	SUN-3K -SG04LP1-AU	SUN-3.6K -SG04LP1-AU	SUN-5K -SG04LP1-AU	SUN-6K -SG04LP1-AU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	20-30	40-60	40-60	40-60	40-60
Max. Charging Current (A)	140	70	90	120	135
Max. Discharging Current (A)	140	70	90	120	135
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. PV Input Power (W)	4500	4500	5400	7500	9000
Rated PV Input Voltage (V)	370 (125~500)				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150~425				
Full Load PV Voltage Range (V)	300~425				
PV Input Current (A)	13		13+13		
Max. PV I_{SC} (A)	19.5		19.5+19.5		
Number of MPPT / Strings per MPPT	1/1		2/1+1		
AC Output Data					
Rated AC Output and UPS Power (VA)	3000		3600	5000	6000
Max. AC Output Power (W)	3000		3600	5000	6000
AC Output Rated Current (A)	13		15.7	21.7	26.1
Max. AC Output Current (A)	13		15.7	21.7	26.1
Max. Continuous AC Passthrough (A)	35				40
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	230V/240V0.85Un-1.1Un				
Grid Connection Form	L+N+PE				
Total Harmonics Current Distortion (THDi)	< 3% (of nominal power)				
DC current injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
MPPT Efficiency	99.90%				
Protection					
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				
Certifications and Standards					
Grid Regulation	AS/NZS 4777.2				
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 to +60℃, >45℃ derating				
Cooling	Free cooling				Smart cooling
Noise (dB)	<30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	17			17	
Size (mm)	333W x 433H x229D （Excluding connectors and brackets）				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	10 Years				