

3-PHASE STORAGE INVERTERS

8kW / 10kW / 12kW On-Grid Parity Inverters with Storage

SUNSYNK-8K-3P-SG02LP1

SUNSYNK-10K-3P-SG02LP1

SUNSYNK-12K-3P-SG02LP1

The Sunsynk Three-Phase On-Grid Parity Inverters are highly efficient power management tools for three-phase grid applications. These inverters allow the user to control power flow from multiple sources such as solar, main electrical grids, and generator, and effectively storing and delivering electric power to the grid.

These amazing three-phase inverters have a unique feature. They can operate and balance the load, which means you can have 20% connected to one phase, 20% to another, and 60% to the third phase, and it still gives perfect phase rotation. No other inverter in their class can offer this amazing feature.



Features:

- 48V low-voltage battery.
- Isolation transformer design.
- 6 time periods for battery charging/discharging.
- Maximum charging/discharging current of 250A.
- Frequency droop control.
- Up to 16 inverters in parallel.
- DC and AC couple to retrofit existing solar system.
- Support storing energy from diesel generator.
- Interactive Display.

Model	SUN-8K-SG01LP3	SUN-10K-SG01LP3	SUN-12K-SG01LP3
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range	40~60V		
Max. Charging Current	190A	210A	240A
Max. Discharging Current	190A	210A	240A
Charging Curve	3 Stages/Equalization		
External Temperature Sensor	Optional		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power	9880W	13000W	15000W
PV Input Voltage	450V (140V~1000V)		
MPPT Range	140V~800V		
Start-up Voltage	160V		
PV Input Current	12.5A+12.5A	25A+12.5A	25A+12.5A
No. of MPPT Trackers	2		
No. of Strings Per MPPT Tracker	1+1	2+1	2+1
AC Output Data			
Rated AC Output and UPS Power	8000W	10000W	12000W
Max. AC Power	8800W	11000W	13200W
Peak Power (off-grid)	2 times of rated power, 10 S		
AC Output Rated Current	11.6A	14.5A	17.4A
Max AC Output Current	12.8A	16A	19.1A
Max Continuous AC Passthrough	60A	60A	60A
Output Frequency and Voltage	50-60Hz; 230/400Vac (Three Phase)		
Grid Type	Three Phase		
Current Harmonic Distortion	THD<3% (Linear load<1.5%)		
Efficiency			
Max. Efficiency	97.6%		
MPPT Efficiency	97.0%		
Euro Efficiency	99.9%		
Protection			
PV Arc Fault Detection	Integrated (Except European Type)		
PV Input Lightning Protection	Integrated		
Anti-islanding Protection	Integrated		
PV String Input Reverse Polarity Protection	Integrated		
Insulation Resistor Detection	Integrated		
Residual Current Monitoring Unit	Integrated		
Output Over Current Protection	Integrated		
Output Shorted Protection	Integrated		
Output Over Voltage Protection	Integrated		
Surge Protection	DC Type II / AC Type II		
Certifications and Standards			
Grid Regulation	UL1741, IEEE1547, RULE21, VDE0126, AS4777, NRS2017, G98,G99, IEC61683, IEC62116, IEC61727		
Safety Regulation	IEC2109-1, IEC62109-2		
EMC	EN61000-6-1, EN61000-6-3, FCC 15 Class B		
General Data			
Operating Temperature Range	-25~60°C, >45°C Derating		
Cooling	Fan		
Noise	<30dB		
Communication with BMS	RS485; CAN		
Weight	45kg		
Size (Length x Width x Height)	673 x 462 x 265mm		
Warranty	5 years		