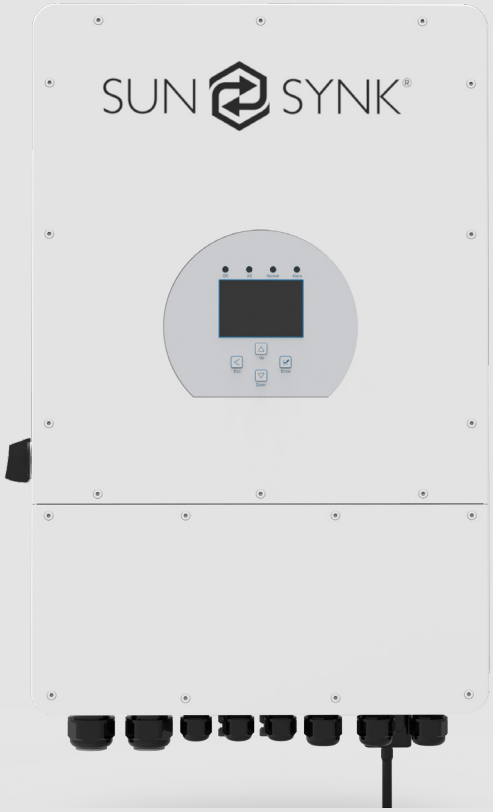
10/12kW Hybrid Inverter

Our inverters have been developed specifically for the UK and Europe to meet the needs posed by these markets. The 10/12kW Hybrid Inverter is suitable for residential and light commercial use, maximizing self-consumption rate of solar energy and increasing your energy impedance.

During the day, the PV system generates electricity which will be provided to the loads initially. Then, the excess energy will charge the battery via the inverter. Finally, the stored energy can be released when the loads require it. The battery can also be charged by the diesel generator to ensure uninterrupted supply in the event of grid blackout. It is equipped with a RS485/CAN port for battery communication.

- Colourful touch LCD, IP65 protection degree.
- DC couple and AC couple to retrofit existing solar system.
- 16 — Max.16 inverters in parallel; support multiple batteries parallel.
- 250 — Max. charging/discharging current of 250A.
- 6 — 6 time periods for battery charging/discharging.
- Support storing energy from diesel generator.
- Warranty included.



Width: 42cm **Height:** 67cm **Depth:** 23.3cm

Model	SUNSYNK-10K-SG02LP1	SUNSYNK-12K-SG02LP1
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range	40~60V	
Max. Charge Current	220A	250A
Max. Discharge Current	220A	250A
Charging Curve	3 Stages/Equalisation	
External Temperature Sensor	Yes	
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS	
PV String Input Data		
Max. DC Input Power	13000W	15600W
Max PV Input Voltage	370V (125~500V)	
MPPT Range	150V~425V	
Full Load DC Voltage Range	200~425	
Start-up Voltage	125V	
PV Input Current	26A+26A+26A	
Max. PV Isc	44A+44A+44A	
No. of MPPT / Strings Per MPPT	3 / 2+2+2	
AC Output Data		
Max. On-Grid AC Power	10000	12000
Max. Off-Grid AC Power	11000	13200
Peak Power (off-grid)	2 times of rated power, 10 S	
AC Output Rated Current	45.5/43.5A	54.6/52.2A
Max AC Current	50/47.9A	60/57.4A
Max Continuous AC Passthrough	60A	
Power Factor	0.8 leading to 0.8 lagging	
Output Frequency and Voltage	50Hz/60Hz; 220/230Vac	
Grid Type	Single-Phase	
Current Harmonic Distortion	THD < 3% (of nominal power)	
DC Current Injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	>99%	
Protection		
Integrated	PV Arc Fault Detection, 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, Over Voltage Category.	
Certifications and Standards		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, G98, VDE-AR-N 4105	
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	<45dB
Communication with BMS	RS485; CAN
Weight	30kg
Size	420W×670H×233D mm (Excluding connectors and brackets)
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years