



# SINGLE-PHASE HYBRID INVERTER




## DATASHEET

SUNSYNK-8K-SG01LP1 / SUNSYNK-8K-SG02LP1

[www.sunsynk.com](http://www.sunsynk.com)  
[sales@sunsynk.com](mailto:sales@sunsynk.com)  
[customerservices@sunsynk.com](mailto:customerservices@sunsynk.com)

v.21 (23/05/24)

 **PLEASE RETAIN FOR  
FUTURE REFERENCE**

Model	SUNSYNK-8K-SG01LP1 / SUNSYNK-8K-SG02LP1
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Li-Ion
Battery Voltage Range	48Vd.c (40Vd.c ~ 60Vd.c)
Max. Charging/Discharging Current	190Ad.c (max.)
Charging Curve	3 Stages / Equalization
External Temperature Sensor	Yes
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
<b>PV String Input Data</b>	
Max. DC Input Power	10400W
PV Input Voltage	370V (125V~500V)
MPPT Range	150~425V
Start-up Voltage	125V
PV Input Current	26Ad.c + 26Ad.c
Max PV Isc	44Ad.c + 44Ad.c
No. of MPPT Trackers	2
No. of Strings Per MPPT Tracker	2+2
<b>AC Output Data</b>	
Rated AC Output and UPS Power	8000W
Max. AC Output Power	8800W
Peak Power (off grid)	2 times of rated power, 10s
AC Output Rated Current	34.8A
Max. AC Current	38.3A
Max. Continuous AC Passthrough	50A
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50 / 60Hz; 208Vac (2 / 3 Phase), 220/230Vac (Single Phase)
Grid Type	2 / 3 Phase; Single 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%
<b>Protection</b>	
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	DC Type II / AC Type II
Over Voltage Category	DC Type II / AC Type III
<b>Certifications and Standards</b>	
Grid Regulation	EN 50549-1, AS-NZS 4777.2, NRS 097-2-1; Additional connections available upon request
EMC/Safety Regulation	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	<30 dB
Communication with BMS	RS485; CAN
Net Weight	32kg
Gross Weight	38.5kg
Cabinet size	420W×670H×233D (Excluding connectors and brackets)
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years



### NOTE:

#### Safe Transport and Handling of Inverter:

When transporting the equipment, use its original packaging and keep it as a complete unit. Store the product in a dry environment, avoiding direct sunlight, and maintain a temperature range between -40°C and 60°C. Since the equipment can be quite heavy, always consider its total weight when moving, transporting, or installing it, ensuring that the installation site has adequate load-bearing capacity. Transporting and installing the inverter should be carried out solely by qualified personnel.



## CONTACT US

**Call us:** +44 151 832 4300 **Email us:** [sales@sunsynk.com](mailto:sales@sunsynk.com)

**HK Address:** Room 702-704, 7/F Texwood Plaza, 6 How Ming Street, Kwun Tong, Kowloon, Hong Kong.

**UK Address:** Sunsynk UK Ltd, 17 Turnstone Business Park, Mulberry Avenue, Widnes, Cheshire, WA8 0WN.

**SA Address:** Globaltech Sunsynk South Africa (Pty) Ltd, Unit 2 Highview Boulevard, Ferndale 2194.

**NL Address:** Sunsynk NL BV, Henri Wijnmalenweg 8, 5657 EP Eindhoven, Netherlands.

GlobalTech Ltd



Powered by  
SUN SYNK