



# ECCO HYBRID INVERTER



## DATASHEET

SYNK-3.6K-SG04LP1  
SYNK-5K-SG04LP1

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

Model	SYNK-3.6K-SG04LP1	SYNK-5K-SG04LP1
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range	40~60V	
Max. Charging Current	90A	120A
Max. Discharging Current	90A	120A
Charging Curve	3 Stages/Equalisation	
Number of Battery Input	Yes	
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS	
PV String Input Data		
Max. DC Input Power	7000W	6500W
PV Input Voltage	370V (125V~500V)	
MPPT Range	150~425V	
Start-up Voltage	125V	
Full Load DC Voltage Range	300~425V	
PV Input Current	13+13A	
Max. PV Isc	17+17A	
No. of MPPT / Strings Per MPPT	2/1+1	
AC Output Data		
Rated AC Output and UPS Power	3600W	5000W
Max. AC Output Power	3960W	5500W
Peak Power (off-grid)	2 times of rated power, 10 S	
AC Output Rated Current	16.4/15.7A	22.7/21.7A
Max AC Current	18/17.2A	25/23.9A
Max Continuous AC Passthrough	35A	
Rated Input/Output Voltage/Range	220V/230V 0.85Un-1.1Un	
Grid Connection Form	L+N+PE	
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz    60Hz/55Hz-65Hz	
Power Factor Adjustment Range	0.8 leading to 0.8lagging	
Total Current Harmonic Distortion THDi	<3% (of nominal power)	
DC Current Injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	>99.00%	
Protection		
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, Surge protection	
Surge Protection Level	TYPE II(DC),TYPE II(AC)	

### Certifications and Standards

Grid Connection Standard	EN 50549-1, AS-NZS 4777.2, NRS 097-2-1; Additional connections available upon request
EMC/Safety Standards	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

### General Data

Operating Temperature Range	-45~60°C, >45°C Derating	
Cooling	Natural Cooling	
Noise	<30dB	
Communication with BMS	RS485; CAN	
Weight	14.6kg	17.5kg
Size	330W x 433H x 238D mm	
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.