



ECCO HYBRID INVERTER



DATASHEET

SYNK-3.6K-SG04LP1

SYNK-5K-SG04LP1

www.sunsynk.com
sales@sunsynk.com
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 (10 years when installed with a Sunsynk battery)	



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 +44 151 832 4300 **Email** sales@sunsynk.com **Website** www.sunsynk.com

- Address**
- HK** Room 702-704, 7/F Texwood Plaza, 6 How Ming Street, Kwun Tong, Kowloon, Hong Kong
 - UK** Sunsynk UK Ltd, 17 Turnstone Business Park, Mulberry Avenue, Widnes, Cheshire, WA8 0WN
 - SA** Unit 2, 3 & 4, 80 Highview Blvd, Ferndale, Randburg, 2160, South Africa
 - NL** Sunsynk NL BV, Henri Wijnmalenweg 8, 5657 EP Eindhoven, Netherlands
 - AU** Level 1, 982-988 Wellington Street, West Perth WA 6005, Australia
 - ES** Tafetana, 32 P.I. Las Andoriñas 38639 Las Chafiras Santa Cruz de Tenerife
 - US** 100 S. Ashley Drive, Suite 600, Tampa, Florida, 33602, United States of America