



ECCO HYBRID INVERTER



DATASHEET

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

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v.11 (07/05/25)



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FUTURE REFERENCE**

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

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