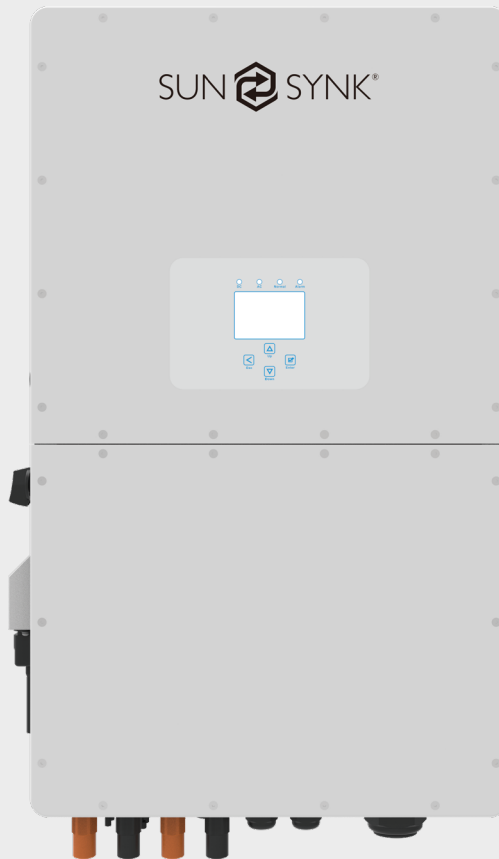




# THREE-PHASE HYBRID INVERTER



## DATASHEET

SUNSYNK-29.9K-SG01HP3-AU-BM3  
SUNSYNK-30K-SG01HP3-AU-BM3  
SUNSYNK-35K-SG01HP3-AU-BM3  
SUNSYNK-40K-SG01HP3-AU-BM4  
SUNSYNK-50K-SG01HP3-AU-BM4

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Model	SUNSYNK-29.9K-SG01HP3-AU-BM3	SUNSYNK-30K-SG01HP3-AU-BM3	SUNSYNK-35K-SG01HP3-AU-BM3	SUNSYNK-40K-SG01HP3-AU-BM4	SUNSYNK-50K-SG01HP3-AU-BM4
<b>Battery Input Data</b>					
Battery Type	Lithium-ion				
Battery Voltage	160~700V				
Max. Charging Current	50+50A				
Max. Discharging Current	50+50A				
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS				
Number of Battery Input	2				
<b>PV String Input Data</b>					
Max. PV Input Power	44850W	45000W	52500W	60000W	75000W
Max. PV Input Voltage	1000V				
Start-up Voltage	180V				
MPPT Range	150~850V				
Full Load MPPT Voltage Range	360-850V		420-850	360-850V	450-850V
Rated PV Input Voltage	600V (180V~1000V)				
Max. Input Short Circuit Current	55+55+55+55A			55+55+55+55A	
Max. Operating PV Input Current	36+36+36+36A			36+36+36+36A	
No. of MPPT/No. of String per MPPT	4/2+2+2+2			4/2+2+2+2	
Max. Inverter Backfeed Current To the Array	0				
<b>AC Output Data</b>					
Rated AC Input/Output Active Power	29900W	30000W	35000W	40000W	50000W
Max. AC Input/Output Apparent Power	29900VA	30000VA	35000VA	40000VA	50000VA
Peak Power (off-grid)	1.5 times rated power, 10sec				
Rated AC Input/Output Current	43.4A	43.5A	50.8A	58.0A	72.5A
Max. AC Input/Output Current	43.4A	43.5A	50.8A	58.0A	72.5A
Max. Continuous AC Passthrough (grid to load)	200A				
Max. Output Fault Current	86.8A	87A	101.6A	116A	145A
Max. Output Overcurrent Protection	144.2A			192.3A	
Rated Input/Output Voltage Range	230/400V 0.85Un-1.1Un				
Grid Connection Form	3L+N+PE				
Rated Input/Output Grid Frequency	50Hz/45-55Hz, 60Hz/55-65Hz				
Power Factor Adjustment Range	0.8 leading to 0.8lagging				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
<b>Efficiency</b>					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	>99.00%				
<b>Communication</b>					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
<b>Protection</b>					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II (DC), TYPE II (AC)				
Anti-Islanding Protection	Active Frequency Shift				

Certifications and Standards	
Grid Connection Standard	AS-NZS 4777.2
EMC/Safety Standards	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
General Data	
Operating Temperature Range	-40 to +60°C, >45°C Derating
Permissible Altitude Humidity	0~100%
Permissible Altitude	2000m
Noise	<65 dB
Ingress Protection (IP)	IP65
Inverter Topolgy	Non-Isolated
Over Voltage Category	OVC II (DC), OVC III (AC)
Size	527*894*294mm
Weight	80kg
Warranty <sup>1</sup>	5/10 years (with battery)
Type of Cooling	Intelligent Cooling

<sup>(1)</sup> The warranty period depends on the final installation site of the inverter, more info please refer to Warranty Policy.



## 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.

## Importer

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## Manufacturer

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Kwun Tong

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Website: <http://www.sunsynk.com>

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