



THREE-PHASE HYBRID INVERTER



DATASHEET

SUNSYNK-5K-SG01HP3-EU-AM2/SUNSYNK-6K-SG01HP3-EU-AM2
SUNSYNK-8K-SG01HP3-EU-AM2/SUNSYNK-10K-SG01HP3-EU-AM2
SUNSYNK-12K-SG01HP3-EU-AM2/SUNSYNK-15K-SG01HP3-EU-AM2
SUNSYNK-20K-SG01HP3-EU-AM2/SUNSYNK-25K-SG01HP3-EU-AM2

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Model	SUNSYNK-5K-SG01HP3-EU-AM2	SUNSYNK-6K-SG01HP3-EU-AM2	SUNSYNK-8K-SG01HP3-EU-AM2	SUNSYNK-10K-SG01HP3-EU-AM2
Battery Input Data				
Battery Type	Li-Ion			
Battery Voltage Range	160~700V			
Max. Charging Current	30A		37A	
Max. Discharging Current	30A		37A	
Number of battery input	1			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power	6500W	78000W	10400W	13000W
Max. DC Input Voltage	1000V			
Start-up Voltage	180V			
MPPT Range	150-850V			
Full Load DC Voltage Range	195-850V	195-850V	260-850V	325-850V
Rated DC Input Voltage	600V			
PV Input Current	20+20A	20+20A	20+20A	20+20A
Max. PV Isc	30+30A	30+30A	30+30A	30+30A
No. Of MPPT Trackers	2			
No. Of Strings Per MPPT Tracker	1+1	1+1	1+1	1+1
AC Output Data				
Rated AC Output and UPS Power	5000W	6000W	8000W	10000W
Max. AC Output Power	5500W	6500W	8800W	11000W
Peak Power(off grid)	1.5 time of rated power, 10 S			
AC Output Rated Current	7.6/7.3A	9.1/8.7A	12.2/11.6A	15.2/14.5A
Max. AC Current	8.4/8.0A	10/9.6A	13.4/12.8A	16.7/16A
Max. Three-phase Unbalanced Output Current	13A	13A	13A	22A
Max. Continuous AC Pass through	40A			
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac			
Grid Type	Three Phase			
total Harmonic Distortion	<3% THD (of nominal power)			
DC injection current (mA)	<0.5%In			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	>99%			
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, Output Shorted Protection			
Output Over Voltage Protection	DC Type II / AC Type III			
Battery Over Current Protection	Fuses			

Certifications and Standards

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	Free Cooling	Intelligent Cooling
Noise	≤55 dB	
Communication with BMS	CAN	
Net Weight	32.50 Kg	
Gross Weight	38.50 Kg	
Size	408W×638H×237D mm (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.

Model	SUNSYNK-12K-SG01HP3-EU-AM2	SUNSYNK-15K-SG01HP3-EU-AM2	SUNSYNK-20K-SG01HP3-EU-AM2	SUNSYNK-25K-SG01HP3-EU-AM2
Battery Input Data				
Battery Type	Li-Ion			
Battery Voltage Range	160~700V			
Max. Charging Current	37A			50A
Max. Discharging Current	37A			50A
Number of battery input	1			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power	15600W	19500W	26000W	32500W
Max. DC Input Voltage	1000V			
Start-up Voltage	180V			
MPPT Range	150-850V			
Full Load DC Voltage Range	340-850V	420-850V	500-850V	625-850V
Rated DC Input Voltage	600V			
PV Input Current	26+20A	26+20A	26+26A	26+26A
Max. PV Isc	39+30A	39+30A	39+39A	39+39A
No. Of MPPT Trackers	2			
No. Of Strings Per MPPT Tracker	2+1	2+1	2+2	2+2
AC Output Data				
Rated AC Output and UPS Power	12000W	15000W	20000W	25000W
Max. AC Output Power	13200W	16500W	22000W	27500W
Peak Power(off grid)	1.5 time of rated power, 10 S			
AC Output Rated Current	18.2/17.4A	22.8/21.8A	30.4/29A	37.9/36.3A
Max. AC Current	20/19.2A	25/24A	33.4/31.9A	41.7/39.9A
Max. Three-phase Unbalanced Output Current	25A	30A	35A	41.7A
Max. Continuous AC Pass through	80A			
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac			
Grid Type	Three Phase			
total Harmonic Distortion	<3% THD (of nominal power)			
DC injection current (mA)	<0.5%1n			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	>99%			
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, Output Shorted Protection			
Output Over Voltage Protection	DC Type II / AC Type III			
Battery Over Current Protection	Fuses			

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Net Weight	32.50 Kg
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Size	408W×638H×237D mm (Excluding connectors and brackets)
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Installation Style	Wall-mounted
Warranty	5 years



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