



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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 **PLEASE RETAIN FOR
FUTURE REFERENCE**

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	Lithium-ion			
Battery Voltage	160~700V			
Max. Charging Current	30A		37A	
Max. Discharging Current	30A		37A	
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS			
Number of Battery Input	1			
PV String Input Data				
Max. PV Input Power	6500W	7800W	10400W	13000W
Max. PV Input Voltage	1000V			
Start-up Voltage	180V			
MPPT Range	150~850V			
Rated PV Input Voltage	600V			
Max. Input Short Circuit Current	30+30A			
Max. Operating PV Input Current	20+20A			
No. of MPPT/No. of String per MPPT	2/1+1			
AC Output Data				
Rated AC Input/Output Active Power	5000W	6000W	8000W	10000W
Max. AC Input/Output Apparent Power	5500W	6500W	88000W	11000W
Peak Power (off-grid)	2 times of rated power, 10 S			
Rated AC Input/Output Current	7.6/7.3A	9.1/8.7A	12.2/11.6A	15.2/14.5A
Max. AC Input/Output Current	8.4/8.0A	10/9.6A	13.4/12.8A	16.7/16A
Max. Continuous AC Passthrough (grid to load)	40A			
Max Three Phase Unblanaced Output Current	13A			22A
Rated Input/Output Voltage Range	220/380V, 230/400V 0.85Un-1.1Un			
Grid Connection Form	3L+N+PE			
Rated Input/Output Grid Friquency	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			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	>99.00%			
Communication				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
Protection				
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)			
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	-40 to +60°C, >45°C Derating			
Permissible Altitude Humidity	0~100%			
Permissible Altitude	2000m			
Noise	<55 dB			
Ingress Protection (IP)	IP65			
Inverter Topolgy	Non-Isolated			
Over Voltage Category	OVC II (DC), OVC III (AC)			
Size	408*638*237mm			
Weight	30.5kg			
Warranty	5 years (10 years when installed with a Sunsynk battery)			
Type of Cooling	Intelligent Cooling			

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	Lithium-ion			
Battery Voltage	160~700V			
Max. Charging Current	37A		50A	
Max. Discharging Current	37A		50A	
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS			
Number of Battery Input	1			
PV String Input Data				
Max. PV Input Power	15600W	19500W	26000W	32500W
Max. PV Input Voltage	1000V			
Start-up Voltage	180V			
MPPT Range	150~850V			
Rated PV Input Voltage	600V			
Max. Input Short Circuit Current	39+30A		39+39A	
Max. Operating PV Input Current	26+20A		26+26A	
No. of MPPT/No. of String per MPPT	2/2+1		2/2+2	
AC Output Data				
Rated AC Input/Output Active Power	12000W	15000W	20000W	25000W
Max. AC Input/Output Apparent Power	13200W	16500W	22000W	27500W
Peak Power (off-grid)	2 times of rated power, 10 S			
Rated AC Input/Output Current	18.2/17.4A	22.8/21.8A	30.4/29A	37.9/36.3A
Max. AC Input/Output Current	20/19.2A	25/24A	33.4/31.9A	41.7/39.9A
Max. Continuous AC Passthrough (grid to load)	80A			
Max Three Phase Unblanaced Output Current	25A	30A	35A	41.7A
Rated Input/Output Voltage Range	220/380V, 230/400V 0.85Un-1.1Un			
Grid Connection Form	3L+N+PE			
Rated Input/Output Grid Friquency	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			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	>99.00%			
Communication				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
Protection				
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			
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General Data				
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Permissible Altitude Humidity	0~100%			
Permissible Altitude	2000m			
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Ingress Protection (IP)	IP65			
Inverter Topolgy	Non-Isolated			
Over Voltage Category	OVC II (DC), OVC III (AC)			
Size	408*638*237mm			
Weight	30.5kg			
Warranty	5 years (10 years when installed with a Sunsynk battery)			
Type of Cooling	Intelligent Cooling			



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