

SINGLE-PHASE HYBRID INVERTER



DATASHEET

SUNSYNK-10K-SG02LP1 SUNSYNK-12K-SG02LP1

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Model	SUNSYNK-10K-SG02LP1	SUNSYNK-12K-SG02LP1
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range	40~60V	
Max. Charge Current	220A	250A
Max. Discharge Current	220A	250A
Charging Curve	3 Stages/Equalisation	
External Temperature Sensor	Yes	
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS	
PV String Input Data		
Max. PV Input Power	15000W	18000W
Max. PV Input Voltage	500V	
MPPT Voltage Range	150V~425V	
Start-up Voltage	125V	
Rated PV Input Voltage	370V	
Max. Operating PV Input Current	26A+26A+26A	
Max. PV Isc	44A+44A	
No. of MPPT / Strings Per MPPT	3 / 2+2+2	
AC Input/Output Data		
Rated AC Input/Output Active Power	10000W	12000W
Max. AC Input/Output Apparent Power	11000VA	13200VA
Rated AC Input/Output Current	45.5/43.5A	54.6/52.2A
Max. AC Input/Output Current	45.5/43.5A	54.6/52.2A
Max Continuous AC Passthrough	60A	
Peak Power (Off-Grid)	2 times of rated power, 10 S	
Power Factor	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range	220/230V 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/		
Range	50/45-55Hz, 60/55-65Hz	
Grid Connection Form	L+N+PE	
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%	
Protection		
	PV Arc Fault Detection, PV Input L	ightning Protection, Anti-islanding
	Protection, PV String Input Rever	3
Integrated	Resistor Detection, Residual Curr	
	·	ted Protection, Surge Protection,
	Over Voltag	
Surge Protection Level	TYPE II(DC),	
Over Voltage Category	OVC II(DC),	OVC III(AC)
Certifications and Standards	511 505 10 · · · · · · · · · · ·	
Grid Regulation		5 097-2-1; Additional connections
Safety EMC / Standard	available up	EN 62109-1, IEC/EN 62109-2
2 SINGLE PHASE HI 10/12kW Datasheet	ILC/LIN 01000-0-1/2/3/4, IEC/	
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General Data		
Operating Temperature Range	-40 to +60°C, >45°C Derating	
Cooling	Intelligent Air Cooling	
Noise	<45dB	
Communication with BMS	RS485; CAN	
Net Weight	36 kg	
Gross Weight	42 kg	
Size	420W×670H×233D 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.







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