SINGLE-PHASE HYBRID INVERTER



DATASHEET

SUNSYNK-3.6K-SG03LP1
SUNSYNK-5K-SG03LP1

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Model	SUNSYNK-3.6K-SG03LP1	SUNSYNK-5K-SG03LP1
Battery Input Date		
Battery Type	Lead-acid or Li-Ion	
Battery Voltage Range	48Vd.c (40Vd.c ~ 60Vd.c)	
Max. Charging/Discharging Current	90Ad.c (max.)	120Ad.c (max.)
Charging Curve	3 Stages / Equalization	
External Temperature Sensor	Yes	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
PV String Input Data		
Max. DC Input Power	4680W	6500W
PV Input Voltage	370V (125V~500V)	
MPPT Range	150~425V	
Full Load DC Voltage Range	300~425V	
Start-up Voltage	125V	
PV Input Current	13Ad.c + 13Ad.c	
No. of MPPT Trackers	2	
No. of Strings Per MPPT Tracker	1+1	
AC Output Data		
Rated AC Output and UPS Power	3600W	5000W
Max. AC Output Power	3960W	5500W
Max. AC Output Apparent Power	3600VA	5000VA
Peak Power (Off-Grid)	2 times of rated power, 10s	
AC Output Rated Current	16.4/15.7Aa.c	22.7/21.7Aa.c
Max. AC Current	18/17.2Aa.c	25/23.9Aa.c
Max. Continuous AC Passthrough	35A	
Power Factor	0.8 leading to 0.8 lagging	
Output Frequency and Voltage	50/60Hz; 220/230Vac (single phase)	
Grid Type	Single Phase	
Total Harmonic Distortion (THD)	<3% (of nominal power)	
DC current injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
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.	
Surge Protection	DC Type II / AC Type II	
Over Voltage Category	DC Type II / AC Type III	

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 ℃, >45 ℃ Derating
Cooling	Smart cooling
Noise	<30 dB
Communication with BMS	RS485; CAN
Net Weight	22.5kg
Gross Weight	27.5kg
Cabinet size	330W×580H×232D 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.

SUN SYNK®

CONTACT US

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