

# Hybrid Inverter

## SUN-SL-HP5K-A1



## Overview

SUN-SL-HP5K-A1 is a versatile hybrid inverter that integrates the functions of a bidirectional inverter, solar charger, and battery charger, offering portable uninterruptible power supply support. It supports smart system control, various working modes, and autonomous energy management.

## Features

- Supports low-voltage battery systems for enhanced safety.
- Supports 150% PV oversizing.
- Supports 110% AC overloading output.
- Supports 150% backup power output for 10 seconds.
- Supports 200% AC input.
- Battery charge/discharge current up to 100A.
- 10ms EPS switch time.

- Supports smart load management.
- Supports parallel operation with up to 5 inverters (to be launched in 2025).
- Compatible with grid voltage or diesel generator power supply (to be launched in 2025).
- Supports overload protection, overtemperature protection, and short-circuit protection.
- Allows to disable feed-in, meeting regulation requirements of different regions.
- Supports remote monitoring on an app via Wi-Fi connection.
- IP66 protection, allows for outdoor use.

## Specifications

<b>SUN-SL-HP5K-A1</b>	
<b>PV String Input Data</b>	<b>Description</b>
Max. PV Input Power	7500W
Max. PV Input Voltage	600V
Rated PV Input Voltage	360V
Start-up Voltage	120V
MPPT Voltage Range	100~550V
Full Load MPPT Voltage Range	280~500V
Max. PV Input Current	16/16A
Max. DC Short Circuit Current	20/20A
No.of MPPT Trackers	2
No.of Strings Per MPPT	1/1
<b>Battery Input Data</b>	<b>Description</b>
Battery Type	Li-ion
Battery Voltage Range	40~60V
Max. Charging Current	100A
Max. Discharging Current	100A
No.of Battery Input	1
<b>AC input/output data(On-grid)</b>	<b>Description</b>
Rated AC Output Power	5000W
Max. AC Output Apparent Power	5500VA
Grid Type	Single Phase
Rated AC Voltage	220V/230V/240V, L/N/PE
Rated AC Frequency	50/60Hz
Rated AC Output Current	22.7/21.7/20.8A

Max. AC Output Current	25/23.9/22.9A
Power Factor	0.8 leading to 0.8 lagging
THDi (@Rated Power)	<3%
Max. AC Power From Grid	10000VA
Max. Current From Grid	45.5/43.5/41.7A
<b>AC Output Data (Back-up)</b>	<b>Description</b>
Rated Output Power	5000W
Max. Output Apparent Power	5500VA
Peak Output Apparent Power	6000W@60s, 7500W@10s
Rated Output Voltage	230V, L/N/PE
Rated Output Frequency	50/60Hz
Rated Output Current	21.7A
Max Output Current	23.9A
Switch Time	10ms
THDv (@Linear Load)	<3%
<b>Protection</b>	<b>Description</b>
Anti-islanding Protection	Integrated
PV Input Reverse Polarity Protection	Integrated
Insulation Resistor Detection	Integrated
Ground Fault Monitoring	Integrated
Residual Current Monitoring (GFCI)	Integrated
AC Overcurrent Protection	Integrated
AC Short Circuit Protection	Integrated
AC Overvoltage Protection	Integrated
DC Switch (Solar)	Integrated
AFCI	Optional
Remote Shutdown	Integrated
Thermal Protection	Integrated
DC Surge Protection	DC Type II / AC Type III
AC Surge Protection	DC Type II / AC Type III
<b>Working Efficiency</b>	<b>Description</b>
Max. Efficiency	97.23%
Euro Efficiency	96.59%
MPPT Efficiency	>99%
<b>General Data</b>	<b>Description</b>
User Interface	LED & APP
Communication With BMS	CAN
Communication With Portal	WiFi+LAN/4G(Optional)
Dimension(W×D×H mm)	462*208*511mm

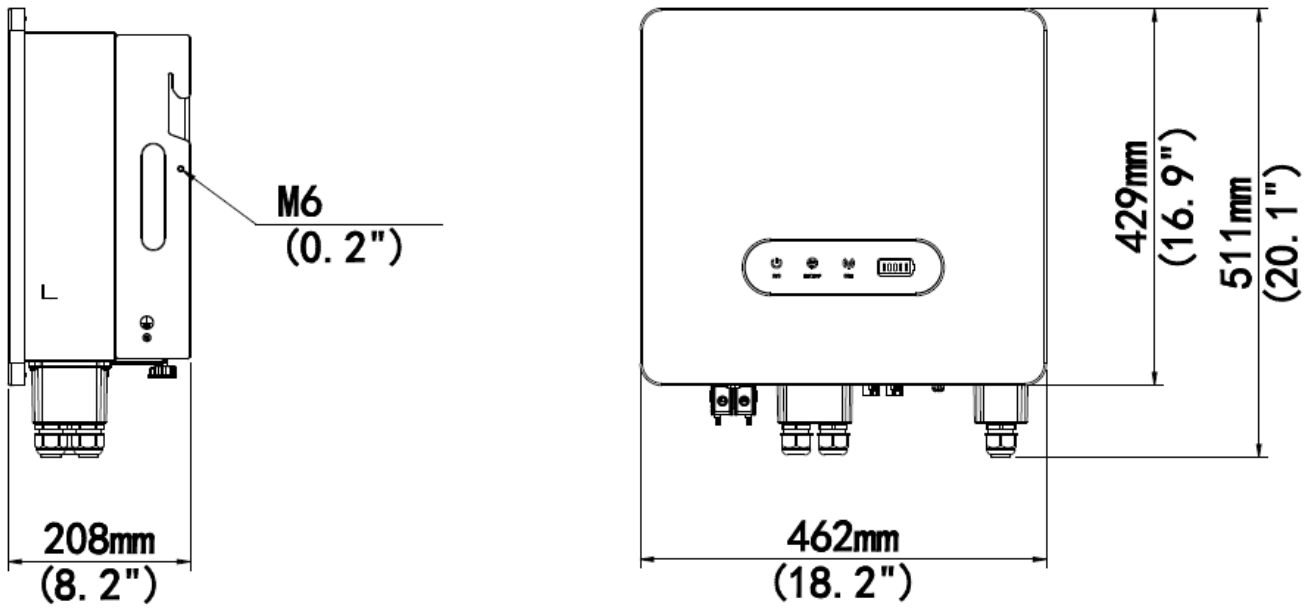
Weight	23.8kg
Self-consumption At Night	<10W
<b>Certifications and Standards</b>	<b>Description</b>
Grid Connection Standard	NTS TypeA, UNE 217002, UNE_217001, EN 50549-1&-10, G99, G98, G100, CEI 0-21
Safety Standard	IEC62109-1&2
EMC Standard	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN301 489-1/-17
<b>Operating Conditions</b>	<b>Description</b>
Operating Temperature Range	-25~60 °C
Storage Temperature Range	-25~85 °C
Operation Relative Humidity	≤95%, RH
Max. Operation Altitude	3000m(>2000m power derating)
Ingress Protection	IP66
Cooling Concept	Natural Cooling
Installation Style	Wall-mounted
Noise Emission	<30dB
Warranty	10 Years

## Ordering Information

Model	Qty	Remarks
SUN-SL-HP5K-A1	1	Hybrid inverter (single-phase, low voltage, on-grid/off-grid, 5kW AC output, EU)

## Dimensions

Dimensions: 462(W)\*208(D)\*511(H) mm



**HopeTrek Innovations Co., Ltd.**

Room 57, 3/F, Block A, East Sun Industrial Centre, 16 Shing Yip Street, Kwun Tong, Kowloon, Hong Kong

Email: [marketing@hopetrekpower.com](mailto:marketing@hopetrekpower.com).

<http://www.hopetrekpower.com>

Product specifications and availability are subject to change without notice.