



## SINGLE PHASE HYBRID INVERTER

# HiWAVE SERIES 4-6 kW

### Description

Solenso Hybrid Inverter (4-6kW) is a versatile solution compatible with single phase systems, meeting the storage needs of using PV panels. This intelligent energy storage solution features a Grid Former function that activates the PV panels in off-grid environments, increasing PV panel utilization. Support single phase pure sine wave output. Its IP65 protection rating ensures waterproof and dustproof performance, ensuring reliable performance in a variety of environments.

## Features



#### SMART CONTROL

Various storage modes can be chosen on Solenso Island support.



#### MPPT CHANNELS

Up to 2 MPPT Channels



#### MAX. 120A

Max. Charge/Discharge Current 120A



#### UPS FUNCTION

Switch Time < 10ms



#### PV OVERSIZE

1.5 Times PV Oversize



#### GRID FORMER

Activate PV panels in off-grid environment.

# Technical Specifications

Technical Data	HiWave-SL4	HiWave-SL4.6	HiWave-SL5	HiWave-SL5.5	HiWave-SL6
<b>PV Input</b>					
Max. Input Power (kW)	6	6.9	7.5	8.3	9
Max. PV Voltage (V)	550				
MPPT Range (V)	80 - 500				
Full MPPT Range (V)	120 - 500	130 - 500	150 - 500	160 - 500	170 - 500
Normal Voltage (V)	360				
Startup Voltage (V)	100				
Max. Input Current Per MPPT (A)	18.5				
Max. Short Current Per MPPT (A)	26				
No. of MPP Tracker / No. of PV String	2 / 2				
<b>Battery Port</b>					
Max. Charge/Discharge Power (kW)	4.0	4.6	5.0	5.5	6.0
Max. Charge/Discharge Current (A)	120				
Battery Normal Voltage (V)	51.2				
Battery Voltage Range (V)	40 - 60				
Battery Type	Li-ion / Lead-acid etc.				
<b>AC Grid</b>					
Max Continuous Current (A)	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	4.0	4.6	5.0	5.5	6.0
Nominal Grid Current (A)	18.2 / 17.4	21.0 / 20.0	22.8 / 21.8	25.0 / 24.0	27.3 / 26.1
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230				
Nominal Grid Frequency (Hz)	50 / 60				
Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)				
Current THD (%)	< 3				
<b>AC Load Output</b>					
Max Continuous Current (A)	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	4.0	4.6	5.0	5.5	6.0
Max Peak Current (A) (10min)	27.3 / 26.1	31.4 / 30	34.1 / 32.7	37.8 / 36.1	41.0 / 39.2
Max Peak Power (kVA) (10min)	6.0	6.9	7.5	8.3	9.0
Nominal AC Voltage L-N (V)	220 / 230				
Nominal AC Frequency (Hz)	50 / 60				
Switching Time (ms)	Seamless				
Voltage THD (%)	< 3				
<b>Efficiency</b>					
CEC Efficiency (%)	97.0				
Max. Efficiency (%)	97.6				
PV to Bat. Efficiency (%)	98.1				
Bat. between AC Efficiency (%)	96.8				
<b>Protection</b>					
PV Reverse Polarity Protection	Yes				
Over Current/Voltage Protection	Yes				
Anti-Islanding Protection	Yes				
AC Short Circuit Protection	Yes				
Residual Current Detection	Yes				
Ground Fault Monitoring	Yes				
Insulation Resister Detection	Yes				
PV Arc Detection	Yes				
Enclosure Protect Level	IP65 / NEMA4X				
AC/DC surge protection	Type II				
<b>General Data</b>					
Dimensions (W x H x D, mm)	370 x 535 x 192				
Weight (kg)	20.5				
Topology	Transformerless				
Cooling	Intelligent Fan				
Relative Humidity	0 - 100 %				
Operating Temperature Range (°C)	- 25 to 60				
Operating Altitude (m)	< 4000				
Standby Consumption (W)	< 10				
Mounting	Wall Bracket				
Communication with RSD	SUNSPEC				
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G, Sunspec				
Certification & Approvals	NRS097, G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2, IEC62477-1				
EMC	EN61000-6-2, EN61000-6-3				