

# Specification Sheet



## 1. Inverter specification

Model	Powerwave SP5H Inverter -INV
DC	
Recommended DC power [W]	4600
Max. DC voltage [V]	550
Normal DC operating voltage [V]	360
MPPT voltage range [V]	125-530
Max. input current [A]	12/12
Max. short circuit current [A]	15/15
Number of MPP trackers	2
Strings per MPP tracker	1
AC	
AC nominal power [W]	4600
Max. apparent power [VA]	4600
Nominal AC voltage; range [V]	230VAC 50/60Hz; 180~270VAC
AC nominal current [A]	20
Total harmonic distortion (THD)	3%
Power factor (rated power)	1
Displacement power factor	0.80leading...0.80lagging
Max. output current [A]	21.7
AC input voltage [V]	230
AC input current [A]	13
AC input frequency [HZ]	50/60
Max. short-circuit current [A]	50
Max. inverter backfeed current to the array [mA]	500
Max. output fault current [A]	150
Max. output overcurrent protection [A]	25

Model	Powerwave SP5H Inverter -INV
Efficiency	
MPPT efficiency	99.9%
Euro-efficiency	97.0%
Max. efficiency	97.6%
Standby losses	< 3W

Model	Powerwave SP5H Inverter -INV
Others	
DC switch	Optional
WiFi monitoring	Optional
Export control	Yes
Expand with external BMU	Yes
EPS	Optional(with external BMU)
Force time use	Yes(with external BMU)
Self use	Yes(with external BMU)

Model	Powerwave SP5H Inverter -INV
Others	
Max. No. of supported external charger	1
Operating temperature range [°C]	-10~+50 (derating at 40)
Storage stability range [°C]	-20~+60
Altitude [m]	<2000
Cooling concept	Forced airflow
Noise emission (typical) [dB]	<40
Humidity [%]	0~95 (non-condensing)
Degree of protection	Ip20 (for indoor use)
Overvoltage category	III (electric supply side), II (PV side)
EMC	IEC61000-6-1/2/3/4
Topology	Non-isolated
BUS Voltage Range	360-550V $\equiv$
Max.BUS Current [A]	15A
Dimensions (W/H/D) [mm]	451*455*121.5
Weight [kg]	23.5kg
Communication interfaces	Ethernet/Dry contact /Wifi
Protective class	I
Grid monitoring	AS4777.2/VDE-AR-N 4015/CEI0-21 EN50438/VDE0126-1-1/IEC61727 OVE/ONORME8001-4-712 / G59 UTE15-712-1/NRS097-2-1/ C10/114

#### EPS Output

Model	Powerwave SP5H Inverter -INV
Rated vo tage (V)	230
Rated frequency(Hz)	50/60
Rated current (A)	11
EPS Peak power[VA]	1.5xPrated, 10s
Total harmonic distortion (THD)	<3%
Switch time(s)	<5
Max. apparent power [VA]	4000VA

## 2 BMU specification

#### Battery manager

Model	Powerwave SP5H Inverter -INV
Battery tpye	Lead-acid battery/lithium battery
Battery nominal voltage(V)	48
Battery voltage range (V)	40-60
Recommend battery capacity(KWH)	20
Charging curve	3-stage adaptive with maintenance
Over current protection	Yes
Over temperature protection	Yes
Communication with inverter	CAN
Communication with Battery	RS232/CAN

#### Charge and discharge

Model	Powerwave SP5H Inverter -BMU
Charge	
Max.power(W)	5000
Max.charge current(A)	100
Max.charge efficiency	94%
Depth of discharge	80%(adjustable)
Discharge	
Max.power(W)	5000
Max.charge current(A)	100
Max.charge efficiency	94%

### Others

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Operating temperature range (°C)	-10~+50 (derating at 40)
Storage temperature range (°C)	-20~+60
Altitude (m)	<2000
Cooling concept	Forced airflow
Noise emission (typical) (dB)	<40
Humidity (%)	0~95(non-condensing)
Degree of protection	IP20
Dimensions (W /H / D) (mm)	451*455*121.5
Weight (kg)	16
Gross Dimensions (W /H / D) (mm)	570*718*272
Gross Weight (kg)	21