# **SYNAPSE 5.0+ Solar Hybrid Inverter**



- Pure sine wave solar inverter
- · Output power factor 1
- · High PV input voltage range
- Inverter runs without battery
- Built-in 80A MPPT solar charger
- Battery equalization function to optimize battery performance and extend lifecycle
- Built-in anti-dusk kit for harsh environment

The new dustproof design dramatically increases product reliability in harsh environments. The inverter automatically detects when the anti-dust kit is installed and internally compensates for any temperature change.



### **SYNAPSE 5.0+ Technical Specifications**

Rated Power	5000W
INPUT	
Voltage	230 V AC
Selectable Voltage Range	170-280 V AC (For Personal Computers); 90-280 V AC (For Home Appliances)
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230V AC ± 5%
Rated Power	5000W
Efficiency (Peak)	90% ~ 93%
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliance
Waveform	Pure sine wave
BATTERY	
Battery Voltage	48 V DC
Floating Charge Voltage	54 V DC
Overcharge Protection	63 V DC
SOLAR CHARGER & AC CHARG	ER
Maximum PV Array Open Circuit Voltage	500 V DC
Maximum PV Array Power	4000 W
MPP Range @ Operating Voltage	120~450 V DC
Maxmum Solar Charge Current	80 A
Maximum AC Charge Current	60 A
Maximum Charge Current	80 A
PHYSICAL	
Dimension, D x W x H (mm)	100 x 300 x 440
Net Weight (kgs)	10
Communication Interface	USB/RS232
ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Operating remperature	

Product specifications are subject to change without further notice.

## System Diagram

#### Operation with battery connected

Solar Power and AC Power available

Solar Power and AC Power not available

V

John Power

Generator

## Operation without battery connected





