## SYNAPSE



## SYNAPSE 5.0+ Off-Grid Inverter

## Features

- Pure sine wave solar inverter
- Output power factor 1
- High PV input voltage range
- Inverter can run without battery
- Built-In 80A MPPT solar charger
- Battery equalisation function to optimise battery performance and extend lifecycle
- Built-In Anti-Dust Kit for harsh environment use



DATASHEET SYNAPSE 5.0+

Model	
Product Code	SYNAPSE 5.0+
Rated Power	5000VA / 5000W
Input	
Voltage	230V AC
Selectable Voltage Range	170–280V AC (For Personal Computers)
	90–280V AC (For Home Appliances)
Frequency Range	50Hz / 60Hz (Auto Sensing)
Output	
AC Voltage Regulation (Battery Mode)	230V AC ± 5%
Surge Power	10000VA
Efficiency (Peak)	90%–93%
Transfer Time	10ms (For Personal Computers); 20ms (For Home Appliances)
Waveform	Pure sine wave
Battery	
Battery Voltage	48V DC
Floating Charge Voltage	54V DC
Overcharge Protection	63V DC
Solar Charger & AC Charger	
Maximum PV Array Open Circuit Voltage	500V DC
Maximum PV Array Power	4000W
MPPT Range @ Operating Voltage	120-450V DC
Maxmum Solar Charge Current	80A
Maximum AC Charge Current	60A
Maximum Charge Current	80A
Physical	
Dimension (D x W x H)	100mm x 300mm x 440mm
Net Weight	10kg
Communication Interface	USB / RS232
Environment	
Humidity	5% to 95% Relative Humidity (Non-Condensing)
Operating Temperature	-10°C to 55°C
Storage Temperature	-15°C to 60°C