

SYNAPSE

3.0V+

Off-Grid Inverter

- Pure sine wave solar inverter
- Selectable high power charging current
- Wide DC input range
- Built-in 40A MPPT solar charger
- Battery equalisation function to optimise battery performance and extend lifecycle





Model	
Product Code	SYNAPSE 3.0V+
Rated Power	3000VA / 2400W

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 \pm 5%
Surge Power	6000VA
Efficiency (Peak)	90%–93%
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)
Waveform	Pure sine wave

Battery	
Battery Voltage	24V DC
Floating Charge Voltage	27V DC
Overcharge Protection	32V DC

Solar Charger & AC Charger	
Maximum PV Array Open Circuit Voltage	102V DC
Maximum PV Array Power	1000W
MPP Range @ Operating Voltage	30–80V DC
Maximum Solar Charge Current	40A
Maximum AC Charge Current	25A
Maximum Charge Current	60A

Physical	
Dimension (D x W x H)	88 x 225 x 320mm
Net Weight	6,0kgs
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
Product specifications are subject to change without further notice.	

SYNAPSE

5.0+

Off-Grid Inverter

- 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.





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	10 ms (For Personal Computers); 20 ms (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
MPP 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)	100 x 300 x 440mm
Net Weight	10kgs
Communication Interface	USB / RS232

Environment	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	–10°C to 50°C
Storage Temperature	–15°C to 60°C

Product specifications are subject to change without further notice.

SYNAPSE

5.0K+

Off-Grid Inverter

- Zero transfer time to protect mission-critical loads such as servers and ATM.
- Detachable LCD control module with multiple communications.
- Built-in Bluetooth for mobile monitoring (Android App is available).
- Supports USB On-the-Go function.
- Reserved communication port for BMS (RS485, CAN-BUS or RS232).
- Configurable AC/PV output usage timer and prioritisation.
- Optional parallel operation up to 9 units.



Model	
Product Code	SYNAPSE 5.0K+
Rated Power	5000VA / 5000W
Parallel Capability	Up to 9 units



Input	
Voltage	230V AC
Voltage Range	110–280V AC
Frequency Range	50Hz / 60Hz (Auto sensing)

Output	
AC Voltage Regulation (Battery Mode)	230V AC ± 5%
Surge Power	10000VA for 5 sec
Efficiency (Peak)	93% at Line Mode, 90% at Battery Mode
Transfer Time	0ms
Waveform	Pure sine wave

Solar Charger & AC Charger	
Maximum PV Array Open Circuit Voltage	145V DC
Maximum PV Array Power	4000W
MPP Range @ Operating Voltage	60–115V DC
Maximum Solar Charge Current	80A
Maximum AC Charge Current	60A
Maximum Charge Current	140A

Physical	
Dimension (D x W x H)	140 x 303 x 525mm
Net Weight	13.5kgs
Communication Interface	USB / RS232 / RS485 / Bluetooth / Dry-contact

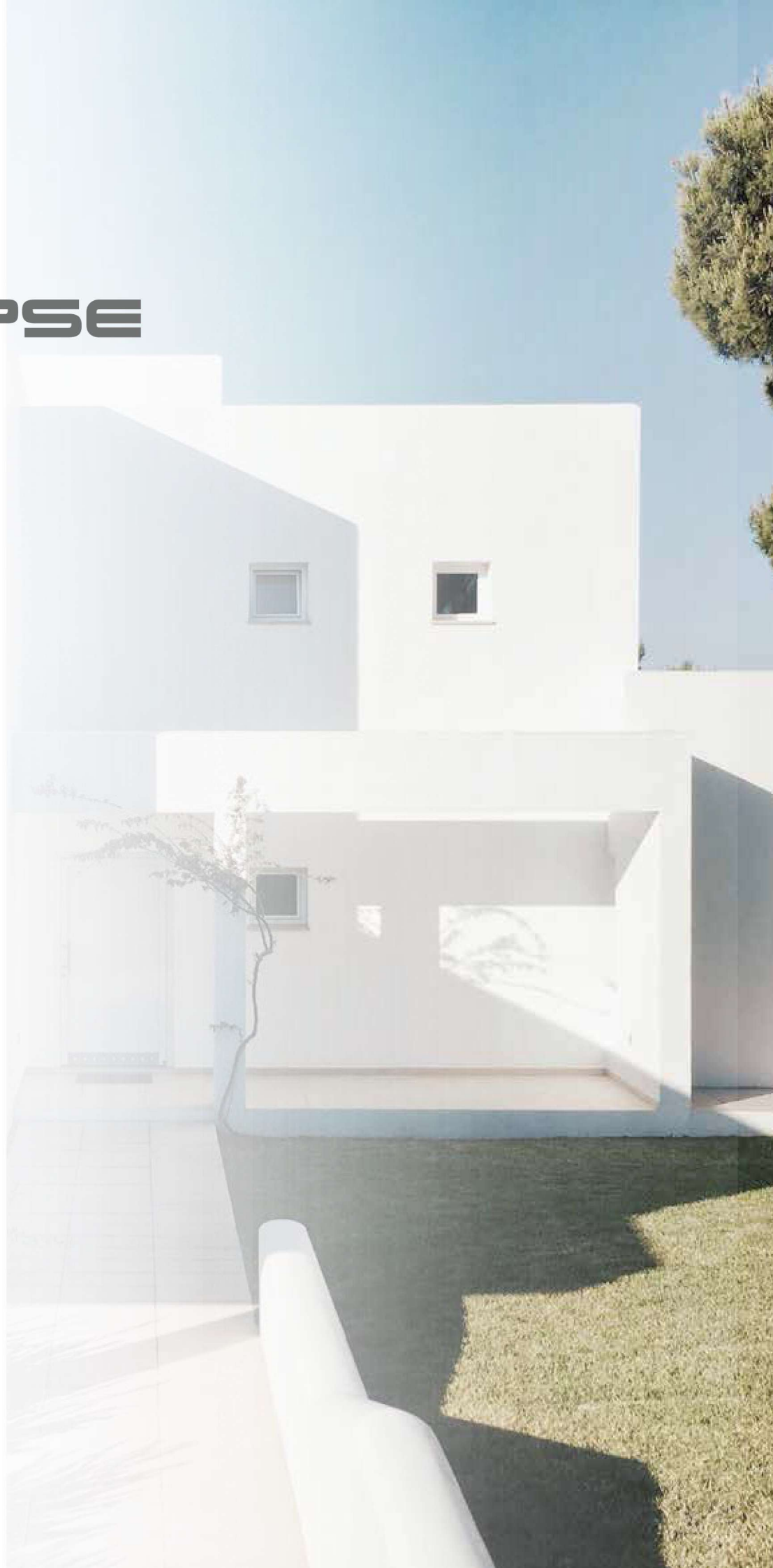
Environment	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	0°C to 55°C
Storage Temperature	-15°C to 60°C

Product specifications are subject to change without further notice.

SYNAPSE

SYNAPSE 7.2M+

- RGB light
- Communication for remote panel
- Parallel connectors
- Diverse communication
- Anti-dust filter
- DC output connectors



SYNAPSE 7.2M+ Features

- Customisable status LED bar with RGB light
- Built-in wifi for mobile monitoring (Android/iOS apps are available)
- Support USB on-the-go function
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Replaceable fan design for ease of maintenance
- Battery independent design
- Configurable AC/PV output usage timer and prioritization
- Selectable high power charging
- Selectable input voltage range for home appliances and personal computers
- Compatible to utility mains or generator input
- Built-in anti-dust kit
- Optional DC output for DC fan, LED bulb, router, etc
- Parallel operation up to 6 units only available for 7.2VA



Model	
Rate Power	7200VA / 7200W
Parallel Capability	Yes, up to 6 units
Input	
Voltage	230 VAC
Selectable Voltage Range	170 - 280 VAC (For Personal Computers); 90 - 280V AC (For Home Appliances)
Frequency Range	50Hz / 60Hz (Auto sensing)
Output	
AC Voltage Regulation (Battery Mode)	230 VAC
Surge Power	15000VA
Efficiency (Peak)	90% ~ 93%
Transfer Time	15 ms (For Personal Computers); 20 ms (For Home Appliances)
Waveform	Pure sine wave
Battery	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
Solar Charger & AC Charger	
Solar Charge Type	MPPT
Maximum PV Array Power	8000W (4000 X 2)
MPPT Range @ Operating Voltage	90 ~ 450V DC
Maximum PV Array Open Circuit Voltage	500V
Maximum Solar Charge Current	80 A
Maximum AC Charge Current	80 A
Maximum Charge Current	80 A
Physical	
Dimensions D,W,H (mm)	147.4 x 432.5 x 553.6
Net Weight (kgs)	18.4
Communication Interface	USB / RS232 / RS485 / Wifi / Dry-contact
Operating Environment	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 50°C
Standard	
Dimensions D,W,H (mm)	UL