

SYNAPSE

3.0+

Off-Grid Inverter

- Pure sine wave solar inverter
- Output power factor 1
- Configurable AC / Solar input priority via LCD setting
- Compatible with AC mains or generator power
- 3.0+ maximum Solar Charge Current = 60A
- MPP Range @ operating voltage = 30–115V DC





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

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	10ms (For personal computers); 20ms (For home appliances)
Waveform	Pure sine wave

Battery	
Battery Voltage	24V DC
Floating Charge Voltage	27V DC
Overcharge Protection	33V DC

Solar Charger & AC Charger	
Maximum PV Array Open Circuit Voltage	145V DC
Maximum PV Array Power	1500W
MPP Range @ Operating Voltage	30–115V DC
Maximum Solar Charge Current	60A
Maximum AC Charge Current	60A
Maximum Charge Current	120A

Physical	
Dimension (D x W x H)	100 x 300 x 440mm
Net Weight	9,5kg
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

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	10ms (For personal computers); 20ms (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	6,0kg
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.	
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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 $\pm 5\%$
Surge Power	10000VA
Efficiency (Peak)	90%–93%
Transfer Time	10 ms (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
MPP Range @ Operating Voltage	120–450V DC
Maximum 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	10kg
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 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 $\pm$ 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	13.5kg
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
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