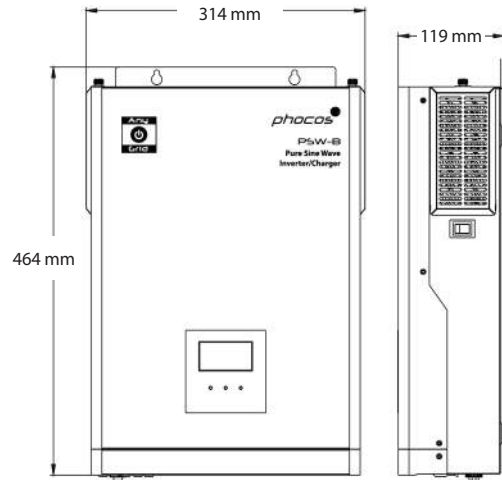


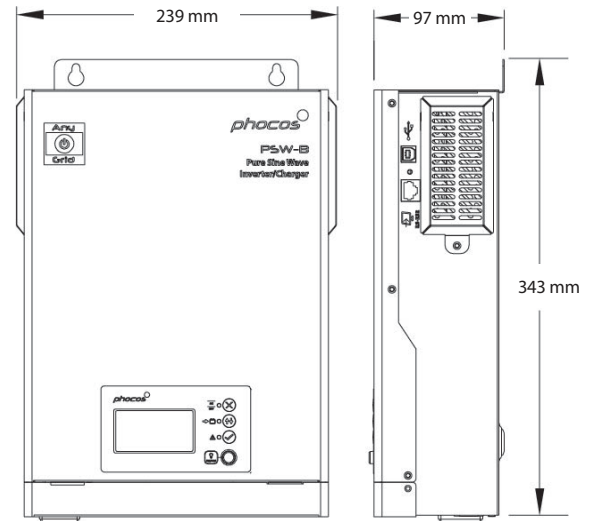
NEW



Technical Drawing



PSW-B-3KW-230/24V and
PSW-B-1.6KW-120/24V



PSW-B-1KW-230/12V and
PSW-B-0.5KW-120/12V

Product Introduction

The Phocos Any-Grid™ PSW-B Series (Pure Sine Wave Battery Inverter Charger) is part of Phocos' versatile line of Any-Grid inverters/chargers. Flexibility and reliability are key characteristics of this product line, with a strong potential for cost saving opportunities in real world conditions. The Any-Grid PSW-B converts DC (Direct Current) into AC (Alternating Current), with multiple advantages beyond standard inverters. This product includes an integrated MPPT charge controller and can function as an AC to DC battery charger, which provides flexible energy access solutions in a broad range of applications.

The battery can be charged from solar and/or an AC source (public grid or generator), with easily programmable priorities. The Any-Grid PSW-B can function without an AC source or alternatively even without solar, as a pure uninterruptible power supply (UPS). When the utility grid or AC generator fails, the PSW-B immediately switches to 'Off-Grid' mode within 10 ms (typical, in UPS mode) to securely power the loads at all times. Solar can be set as the priority energy source to save electricity costs.

This unit comes with a quality, integrated MPPT charge controller, avoiding the need to buy a separate solar charge controller. Solar panels can be connected directly into the Any-Grid PSW-B unit.

**Any-Grid PSW-B Series
is compatible with
Lithium batteries**

Product Features

- Flexible, advanced features with options to solve many common challenges in the field
- Integrated MPPT charge controller
- Integrated AC battery charger
- Charge controller functions even if inverter is turned off to keep batteries fully charged
- Compatible with Lithium batteries
- Display unit with 3 LEDs, 3/4 buttons, and an intuitive LCD screen
- RS-232 and USB connectivity
- Integrated buzzer for error indications
- Common negative and galvanically isolated inverter
- Washable filter reduces dust buildup in the inverter

**Any-Grid PSW-B Series
is the most cost-effective entry
point to all-in-one inverter chargers**

Power Connections:

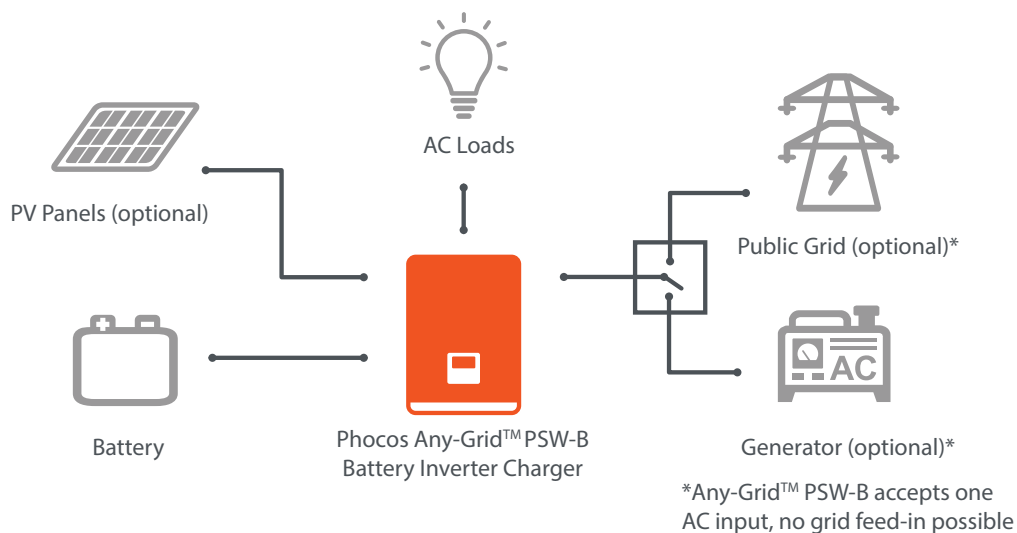
- Solar/PV
- AC Source
- Battery
- AC Output



What is Any-Grid™?

Traditionally, the energy industry defines power systems relative to their access to the grid as Off-Grid or On-Grid. At Phocos, we believe energy access should be available under 'Any-Grid' conditions whether you have full or partial access to renewable energy and/or grid power, and if energy sources are unreliable. The Phocos Any-Grid Inverter Series provides flexible energy access solutions that optimize the use of locally available energy resources that can adapt as access to resources changes over time.

Any-Grid™ PSW-B Capability



Technical Data

Type	PSW-B-3KW-230/24V	PSW-B-1.6KW-120/24V	PSW-B-1KW-230/12V	PSW-B-0.5KW-120/12V
Output Waveform	Pure Sine Wave			
System Voltage	24 Vdc		12 Vdc	
Rated Output Power	3000 VA / 3000 W at 220 ~ 240 Vac*	1500 / 1637 / 1732 VA / W at 110 / 120 / 127 Vac, respectively	1000 VA / 1000 W at 220 ~ 240 Vac	500 VA / 500 W at 110 ~ 127 Vac
Max. Charge Current (PV)	60 Adc		40 Adc	
Max. Charge Current (AC)	60 Adc		20 Adc	
Max. Total Charge Current	120 Adc		60 Adc	
Max. AC Input Current	30 Aac		10 Aac	
Float Charge	27.6 Vdc (adjustable)		13.8 Vdc (adjustable)	
Boost Charge	28.8 Vdc (adjustable)		14.4 Vdc (adjustable)	
Equalization Charge	29.6 Vdc (adjustable)		14.8 Vdc (adjustable)	
Deep-Discharge Protection	22 Vdc (adjustable)		11 Vdc (adjustable)	
Reconnect Level	25.6 Vdc (adjustable)		12.8 Vdc (adjustable)	
Overvoltage Protection	33 Vdc		16 Vdc	
Undervoltage Protection	18.8 Vdc		9.4 Vdc	
Max. PV Panel Voltage	145 Vdc		100 Vdc	
PV Panel MPP Voltage	30 ~ 115 Vdc		15 ~ 80 Vdc	
Max. Usable PV Power	1800 W		600 W	
Max. PV Array Power	2250 Wp		750 Wp	
AC Frequency	50 / 60 Hz auto recognition			
AC Output Voltage	110 ~ 240 Vac ± 5%	110 ~ 127 Vac ± 5%	110 ~ 240 Vac ± 5%	110 ~ 127 Vac ± 5%
Surge Power	2x rated power for 5 seconds			
Inverter Efficiency (from Battery)	> 93 % peak		> 90 % peak	
Idle Self-Consumption	< 37 W		< 15 W	
Grounding	Common negative, galvanically isolated inverter			
Ambient Temperature	-10 to +50 °C / +14 to +122 °F			
Storage Temperature & Humidity	-15 to +60 °C / +5 to +140 °F, 5~95% (non-condensing)			
Max. Altitude	4,000 m above sea level, 1 % power de-rating per 100 m above 1,000 m above sea level			
Battery Type	Lead acid (gel, AGM, flooded), Lithium			
Max. Wire Cross Section	Battery: 35 mm ² (AWG 2) PV: 16 mm ² (AWG 6) AC: 10 mm ² (AWG 8)		Battery: 35 mm ² (AWG 2) PV: 16 mm ² (AWG 6) AC output: 2.5 mm ² (AWG 14)	
Dimensions (WxHxD)	314 x 464 x 119 mm / 12.4 x 18.3 x 4.7 in		239 x 343 x 97 mm / 9.4 x 13.5 x 3.8 in	
Weight	9.6 kg / 21.2 lbs		4.5 kg / 9.9 lbs	
Ingress Protection	IP21			
Certificates	CE compliant, RoHS compliant			
Warranty	2 years			

*Rated output power 1500 / 1637 / 1732 VA/W at 110 / 120 / 127 Vac, respectively.