



Off-Grid Inverters

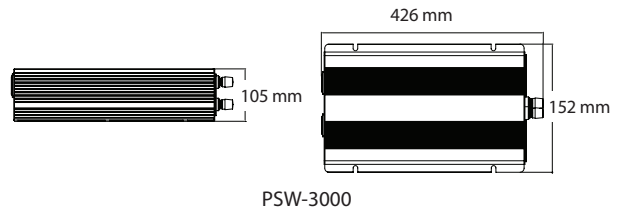
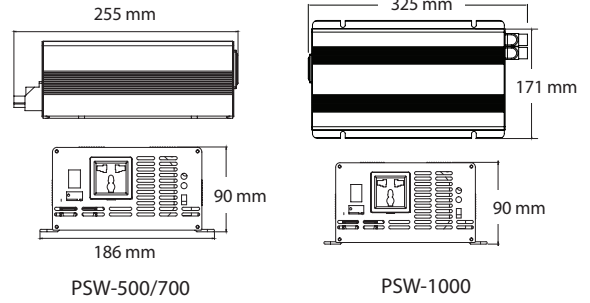




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Technical Drawings



Product Introduction

The Phocos PSW (Pure Sine Wave) inverter series converts DC (Direct Current) energy from solar and other renewable sources, into AC (Alternating Current) power to operate most standard appliances. These units are highly efficient and have a long lifespan to maximize their value in everyday applications. Pure sine wave power is a sophisticated technology that protects even the most sensitive electronics, making it ideal for many modern appliances like TVs, computers, digital clocks, various battery chargers, audio equipment, lamps, and inductive loads like brushless motors, to name a few.

An investment in the Phocos PSW inverter series will make equipment run more efficiently and can help to maximize the life of products being powered. The THD (Total Harmonic Distortion) of Phocos' pure sine wave inverters is below 3%, which translates to a high performance benefit of premium efficiency and a cleaner AC sine wave than many public grids. Overload, short-circuit, DC over/under voltage and overheating protection are standard on all models. PSW series inverters are ideal for standard, mobile and outdoor applications (e. g. cabins/homes, RVs, boats, cars, and various industrial loads).

Product Features

- Low battery warning before shutdown
- Fully isolated input & output
- Load controlled cooling fan
- Output frequency 50/60 Hz switch selectable and universal AC socket allows usage in most parts of the world
- Input undervoltage/overvoltage protections
- Output short-circuit/overload/over temperature protections
- Tri-color indicators display output load level & failure status
- Automatic re-start in case of overload: every 60 s approx.
- Low self-consumption and extremely low-consumption green mode
- High-power USB charging port to recharge smartphones, tablets, etc.

Technical Data

Common specifications for all inverters

Output Waveform	Pure Sine Wave (THD <3%)
AC Frequency	50 / 60 Hz \pm 0.5, Hz selectable by DIP switch
AC Voltage	110 / 230 V (\pm 5%) versions
Overvoltage Protection	15.5 \pm 0.5 (12 V) / 31.0 \pm 1.0 (24 V) / 62.0 \pm 2.0 (48 V)
Undervoltage Protection	10.5 \pm 0.25 (12 V) / 21.0 \pm 0.5 (24 V) / 42.0 \pm 1.0 (48 V)
Efficiency	\geq 85 % worst case, \geq 90 % typical
Storage Temperature & Humidity	-15 to +60 °C, 5-95 % (non-condensing)
Ambient Temperature	-10 to +50 °C
USB Charging Port	5 V, 2.1 A (Not available on 48 V models)
Ingress Protection	IP20
Certificates	CE compliant, RoHS compliant
Warranty	2 years

Type	Weight	Dimensions (mm/in)
PSW-500	2.5 kg / 5.5 lbs	255 x 186 x 90 / 10 x 7.3 x 3.5
PSW-700	2.5 kg / 5.5 lbs	255 x 186 x 90 / 10 x 7.3 x 3.5
PSW-1000	3.2 kg / 7.1 lbs	325 x 171 x 90 / 12.8 X 6.7 X 3.5
PSW-2000	5.2 kg / 11.5 lbs	320 x 152 x 105 / 12.6 x 6 x 4.1
PSW-3000	6.0 kg / 13.2 lbs	426 x 152 x 105 / 16.8 x 6 x 4.1

Model-Specific Data

Model	Rated Power	Surge Power	DC Voltage	No Load Power Consumption (110 V Model)	No Load Power Consumption (230 V Model)	Green Mode Consumption (110 V Model)	Green Mode Consumption (230 V Model)
PSW-500	500 W	1000 W (for 2 seconds)	12 / 24 V versions	<12 / <19.2 W	<12 / <19.2 W	<2.4 / <3.6 W	<2.4 / <3.6 W
PSW-700	700 W	1400 W (for 2 seconds)	12 / 24 V versions	<12 / <19.2 W	<12 / <19.2 W	<2.4 / <3.6 W	<2.4 / <3.6 W
PSW-1000	1000 W	2000 W (for 2 seconds)	12/24/48 V versions	<12 / <19.2 / <38.4 W	<12 / <19.2 / <38.4 W	<2.4 / <3.6 / <4.8 W	<2.4 / <3.6 / <4.8 W
PSW-2000	2000 W	4000 W (for 2 seconds)	12/24/48 V versions	<14.4 / <24 / <38.4 W	<14.4 / <24 / <38.4 W	<2.4 / <4.8 / <4.8 W	<2.4 / <4.8 / <4.8 W
PSW-3000	3000 W	6000 W (for 2 seconds)	12/24/48 V versions	<12 / <19.2 / <38.4 W	<18 / <28.8 / <57.6 W	N/A	<3 / <4.8 / <4.8 W