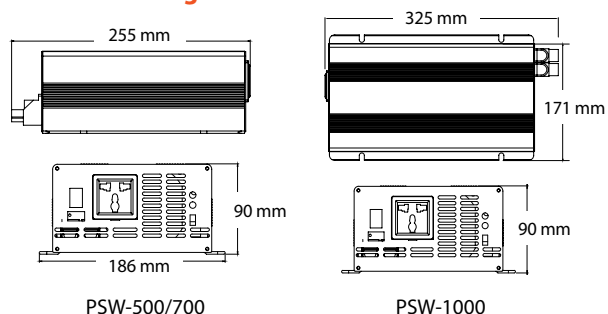


PSW Series (500-3000 W)

Pure Sine Wave Inverters



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. Phocos has designed these units to be 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. 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, RV's, 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
- Input reverse polarity/under voltage/over voltage protections
- Output short-circuit/overload/over temperature protections
- Tri-color indicators display output load level & failure status
- CE, RoHS, E-mark approved
- Ingress protection: IP20
- Automatic re-start in case of overload: Every 60 s approx.

Technical Data

Common specifications for all inverters

Output Waveform	Pure Sine Wave (THD <3%)
Frequency	50/60 Hz ± 0.5 Hz selectable by DIP switch
AC Regulation	$\pm 5\%$
AC Voltage	110 / 230 V versions
Standard Receptacles	Universal
USB Port	5 V, 2.1 A (Not available on 48 V models)
LED Indicators	A: output load level: <20%-off, between 20% and 50% -green, <90%-orange, >90%-red; B: green for power on, red for protection/failure
Frequency and Sleep Mode Settings (DIP switch)	S4-frequency 50/60 Hz; S3-15% output load, S2-10% output load, S1-5% load setting
Low Battery Shutdown	10.5 \pm 0.25 (12V)/ 21.0 \pm 0.5 (24V)/ 42.0 \pm 1.0 (48V)
Ambient Temperature	0 to +40 °C
Storage Temperature & Humidity	-30 to +70 °C, 10-95%
Overvoltage (VDC)	15.5 \pm 0.5 (12V)/ 31.0 \pm 1.0 (24V)/ 62.0 \pm 2.0 (48V)
Overload	Shutdown
Efficiency	$\geq 85\%$ worst case; $\geq 90\%$ typical
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