♣ PSW Series (500-3000 W)

Pure Sine Wave Inverters





Product Introduction

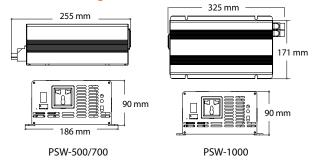
The Phocos PSW (Pure Sine Wave) inverter series converts DC (Direct Current) energy from solar and other renewable sources, into AC (Alternating Current) power to operate most standard appliances. Phocos has designed these units to be highly efficient and have a long lifespan to maximize their value 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 Drawings



Technical Data

Common specifications for all inverters

| Pure Sine Wave (THD <3%) |
|---|
| 50/60 Hz ± 0.5 Hz selectable by DIP switch |
| ±5% |
| 110 / 230 V versions |
| Universal |
| 5 V, 2.1 A (Not available on 48 V models) |
| A: output load level: <20%-off, between 20% and 50%-green, <90%-orange, >90%-red; B: green for power on, red for protection/failure |
| S4-frequency 50/60 Hz; S3-15% output load, S2-10% output load, S1-5% load setting |
| 10.5 ± 0.25 (12 V)/ 21.0 ± 0.5 (24 V)/ 42.0 ± 1.0 (48 V) |
| 0 to +40 °C |
| -30 to +70 ℃, 10-95% |
| 15.5 ± 0.5 (12 V)/ 31.0 ± 1.0 (24 V)/ 62.0 ± 2.0 (48 V) |
| Shutdown |
| ≥85% worst case; ≥90% typical |
| IP20 |
| CE compliant, RoHS compliant |
| 2 years |
| |

| Туре | 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 |