

1-6kW Pure Sine Wave Inverter Charger

This pure sine wave inverter charger provides up to 300% overload capacity for 20 seconds. It features power factor correction for charging and a 15-second delay before transfer when AC power resumes.



ADDITIONAL IMAGES



Overview



Versatile power solution for homes, RVs, marine vessels, and office equipment.

Professional Power Conversion

The PSW7 series is a versatile pure sine wave inverter and charger designed for reliable power conversion in off-grid, mobile, and backup applications. It features high overload capability, intelligent 3-step battery charging, and adjustable settings for various battery types and AC input ranges. Built for demanding environments, this unit ensures power continuity with a typical transfer time of 10ms and robust protection mechanisms.

Performance Metrics

Power Ratings

6 kW

Max Rated Power

300 %

Overload Capacity

90 A

Max Charge Rate

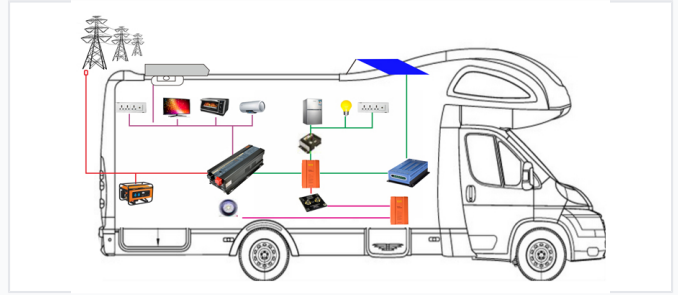
Efficiency

- Nominal Efficiency: >85% (Peak)
- Line Mode Efficiency: >95%
- Power Factor: 0.9 - 1.0

Electrical Specifications



System integration diagram showing solar panels, utility grid, and load connections.



Electrical schematic illustrating inverter integration in mobile power systems.

AC Output

- Waveform: Pure Sine Wave
- Voltage Regulation: $\pm 10\%$ RMS
- Frequency: $50\text{Hz} \pm 0.3\text{Hz}$ / $60\text{Hz} \pm 0.3\text{Hz}$
- Typical Transfer Time: 10ms (Max)

DC Input

- Nominal Input: 12Vdc / 24Vdc / 48Vdc
- Minimum Start Voltage: 10.0Vdc
- Low Battery Trip: 10.0Vdc / 10.5Vdc (Adjustable)
- Idle Consumption: $< 25\text{W}$ (Power Saver On)

Battery & Charging

Compatible Battery Types

Gel U.S.A • A.G.M 1 • A.G.M 2 • Sealed Lead Acid • Gel Euro • Open Lead Acid • Calcium

Charging Features

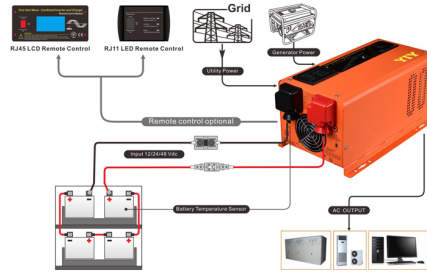
3-Step Intelligent Charging, 8 Preset Battery Types, Power Factor Correction (PFC), De-sulphation Mode

Protection & Safety

Protection Mechanisms

Overload Protection, Over-temperature Protection, Short-circuit Protection, Over-voltage Protection, Low-voltage Protection, Surge Protection

Physical & Interface



Connection overview for grid, generator, and battery inputs.

User Interface

- LCD Status Display
- Battery/AC Priority Switch
- USB Communication Port
- 17 Alarms/Warnings
- Remote Control (Optional)

Mounting

Wall mount