

PS Series

Economical Sine Wave Power Conversion Center

Applications

- ▶ **Off Grid:** Widely used throughout the world as a primary source of AC electricity, the PS offers sine wave, utility grade output power, high capacity battery charger, high-surge current ability (inrush current), and easy installation.
- ▶ **Backup Power:** When the utility fails, the PS Series instantly supplies AC power to critical loads. When utility power returns, it can automatically recharge your batteries in preparation for the next power interruption.

Features

- ▶ 2500 watts of continuous power.
- ▶ Sine wave output for clean, utility grade power.
- ▶ Quiet, high-efficiency operation.
- ▶ Three-stage battery charging system (bulk, absorption, and float) with automatic temperature compensation ensures your batteries are properly maintained.
- ▶ Surge capacity of 2.5 times peak power rating starts even the most demanding loads.
- ▶ Low power consumption (preserves battery capacity).
- ▶ Low battery, overload and overcharge protection circuitry.
- ▶ Seamless transfer switching (grid / generator to battery and battery to grid / generator).

Options

- ▶ Optional SWRC remote allows expanded programming capacity.
- ▶ Optional Generator Start Module (GSM) supports automatic generator start and stop.
- ▶ Stackable design for 120/240 VAC, three-wire, 60 Hz power applications.



Electrical Specifications	PS2512	PS2524	PS2212E	PS2524E	
AC Input Voltage	120 VAC	120 VAC	230 VAC	230 VAC	
AC Input Voltage Range (default)	108 - 132 VAC	108 - 132 VAC	206 - 254 VAC	206 - 254 VAC	
AC Input Current	30 or 50 amps (via selector switch)		15 or 30 amps (via selector switch)		Required for full pass thru and full charging
Continuous Power (@ 25 °C)	2500 VA	2500 VA	2200 VA	2500 VA	
Efficiency (Peak)	90%	92%	90%	92%	
Output Voltage (RMS)	120 VAC	120 VAC	230 VAC	230 VAC	
Output Voltage Regulation (Typical)	± 3%	± 3%	± 3%	± 3%	
Frequency (Nominal)	60 Hz	60 Hz	50 Hz	50 Hz	± 0.04% Crystal Controlled
Continuous Output (@ 25 °C)	21 amps AC	21 amps AC	9.5 amps AC	11 amps AC	
Surge Capability					
5 Sec Rating (Resistive)	5000 watts	6000 watts	4000 watts	6000 watts	
1 mSec	69 amps AC	108 amps AC	35 amps AC	58 amps AC	
100 mSec	35 amps AC	75 amps AC	17 amps AC	38 amps AC	
DC Input Voltage (Nominal)	12 VDC	24 VDC	12 VDC	24 VDC	
DC Input Voltage Range	11.8 - 16.5 VDC	22 - 33 VDC	11.8 - 16.5 VDC	22 - 33 VDC	
DC Current at Rated Power	275 amps DC	140 amps DC	240 amps DC	140 amps DC	
Idle Consumption (Typical at Full Voltage)	< 20 watts	< 20 watts	< 20 watts	< 20 watts	
Search Mode Consumption	< 0.5 watt	< 0.5 watt	< 0.5 watt	< 0.5 watt	
Maximum Charge Rate (Adjustable)	130 amps DC	65 amps DC	100 amps DC	65 amps DC	
Total Harmonic Distortion	3 - 5%	3 - 5%	3 - 5%	3 - 5%	Stand alone operation

Mechanical Specifications			
Specified Temperature Range	32 °F to 104 °F (0 °C to 40 °C)	Enclosure Type	Fully screened, indoor, ventilated, steel chassis with powdercoat finish
Unit Weight	80 lb (36.4 kg)	Shipping	88 lb (40 kg)
Inverter Dimensions	15.5 H x 22.5 W x 6.5" D (38.7 H x 57.1 W x 16.6 cm D)	Shipping Dimensions	20 H x 26 W x 12.75 D (51 H x 66 W x 32.3 cm D)
		Mounting	Vertical wall mount or shelf mount

Features and Options	
Forced Air Cooling	Standard variable speed brushless DC fans
Three-stage charging	Standard three-stage (bulk, absorption, and float)
Communications Adaptor	SWCA - optional adaptor allows PC or modem connection
Battery Temperature Sensor	BTS - standard remote battery temperature sensor for increased battery performance
Remote Control	SWRC - optional remote control and status indicator or RC8 - optional on/off remote control with status LED indicator
Stacking Interface	SWI - optional for series stacking of two identical PS units for 120/240 VAC output - not available on E models
Paralleling Kit	SWI/PAR or SWI/PAR/E - optional for paralleling two identical PS units for twice the power output
Conduit Box	PSCB - optional side mount conduit box for code-compliant DC wiring connections
Generator Start	GSM - optional Generator Start Module allows auto generator start
Auxiliary Relay	ALM - optional Auxiliary Load Module provides voltage controlled relays

Common Specifications			
Waveform	Sine wave, 34 to 52 steps per cycle	Load Sensing (Inverter Mode)	Adjustable 0 to 240 watts (48 watts default)
Power Factor (Allowed)	-1 to 1 pf	Listings	UL Listed to UL 1741 and cUL 107.1-95 and CE compliant