



# SP4024

## Integrated Inverter/Charger System



### A New Breed of Inverter Technology

Our new SP4024 is a powerful 4000 watt, pure sine wave inverter designed for off-grid operation as well as back-up power system applications. SPI's advanced design has successfully combined high frequency, lightweight electronics providing a picture perfect sine wave with a patented high-surge capability. Through the use of our unique GenClean™ technology, independent battery charging electronics clean and regulate the sine wave of the backup power source (i.e., generator), allowing the batteries to provide the excess surge required to start large inductive loads such as motors and pumps. We developed the SP4024 by surveying customers and industry veterans, creating a product with built-in features customers desire. Our design strategy simplifies the installation process and reduces the need for expensive "add-on" components. This philosophy makes the SP4024 one of the industry's easiest inverter systems to install, operate, and maintain.

#### FEATURE & BENEFITS

- **4000 watt output power**
- **Pure sine wave output**
- **2.5X surge capability**
- **Small, quiet, and lightweight (56 lbs)**
- **120V or 240V generator input**
- **Field serviceable design**
- **Intelligent multi-stage battery charger with battery protection**
- **Suitable for 4kW to 16kW, and 240V systems** – Accomplished by stacking multiple SP4024s.
- **GenClean™ technology** – Cleans and regulates generator power providing authentic UPS operation.
- **Cost effective all in one design** – User interface, generator start controller, DC disconnect breaker, DC current shunt, AC disconnect breaker, cabinet enclosure, all included.

*Sleek cabinet enclosure  
neatly fits all components  
and designed to fit  
on standard 16" studs.*



# All-In-One System – Easy to Install, Operate, and Maintain

Many of the inverter systems on the market today require expensive add-on components, increasing the overall system cost and adding complexity to the installation process. The SP4024 Integrated Inverter/Charger System is one of the only systems that includes all the necessary components required for a complete system install. This makes the SP4024 one of the best values in the industry, and it's a breeze to install!

## SP4024 Integrated Inverter/Charger System Features

### Generator Input

- Proprietary GenClean™ design cleans and regulates generator power for a true UPS operation.
- Minimized generator requirements.
- Advanced generator start controller included.
- 120V or 240V generator or grid input to the charger.

### Remote User Interface

- Highly intuitive installation and startup process.
- Simple operations for end user to monitor performance.
- Non-volatile memory and stored system parameters so the user does not have to re-enter the data after powering down.
- Simple menu selections with bright, easily read two-line display.
- **Displays “Gas Gauge” to indicate battery level.**



### Onboard Breaker and Shunt

- Built in 250 amp breaker — no external box to mount or wire, resulting in a cleaner and quicker installation.
- 40 amp dual pole breaker for generator input included.
- Shunt included internally for charge control and data logging.

### Inverter Output

- Picture perfect sine wave output to accommodate the most power-sensitive electronics.
- 4,000 watts continuous at a wide temperature range.
- 2.5X surge accommodates high-inductive loads like pumps and motors.



### Smaller, Lighter and Quieter

- Complete integrated system in one package measuring 17"W x 25"H x 10.5"D.
- Complete system weighs less than 56 pounds; convenient shipping and installation.
- Operates in complete silence, other than air movement for cooling purposes, absolutely no annoying 60 cycle hum.

### Onboard Charger

- Charger is totally separate and independent of the inverter providing a truly uninterrupted power supply.
- Intelligent multi-stage charging to protect batteries from overcharging. Low and high temperature compensation.
- Continuous output up to 136 amps to assure fast charging.
- Charger receives either 120 or 240 VAC input.

### Field Serviceable Design

- Self-diagnostics determine any malfunction, eliminating long onsite technical evaluation.
- Case does not need to be demounted to accommodate access to internal components.
- Modular design accommodates quick and easy board replacements, minimizing onsite technician time.

## The standard SP4024 includes:

- **Advanced User Interface** – Highly intuitive setup, operation, and monitoring interface.
- **Generator Start Controller** – A highly sophisticated startup controller that launches the generator when batteries are low; works with a large variety of ignition systems.
- **DC Disconnect Breaker** – For battery energy source.
- **DC Current Shunt** – For monitoring battery status and renewable energy source.
- **AC Disconnect Breaker** – For generator energy source.
- **Sleek Cabinet Enclosure** – All components fit neatly inside; designed to mount on standard 16" studs.



To learn more about Silent Power call: **888.818.1001** or visit our website: **www.silentpwr.com**