

120V, 1000W PowerVerter APS Inverter/Charger with Pure Sine Wave Output

MODEL NUMBER: **APS1012SW**



Description

Tripp Lite's APS1012SW 3-function, DC-to-AC inverter with auto line-to-battery transfer and integral charging system serves as an extended run UPS, a standalone power source or an automotive inverter.

- **Power Capacity:** Capable of 1000 watts of continuous power or 2000 watts of peak power for brief periods of time.
- **Applications:** Ideal as a reliable power source for tools, appliances, pumps, portable lighting and computer equipment. Designed for easy installation in homes, RVs, commercial and fleet vehicles, emergency vehicles, construction sites and remote worksites.
- **Modes of Operation:** When an AC source is available, the Inverter/Charger keeps the user-supplied batteries charged while simultaneously delivering conditioned, pure sine wave AC power to equipment. In UPS mode, the APS1012SW responds to blackouts and brownouts with an uninterrupted transfer to battery-derived, AC inverter output. It has an unlimited amount of runtime with any number of user-supplied batteries.
- **OverPower / DoubleBoost Capability:** Reliable large transformer design with efficient sine wave output and frequency control powers resistive electronic loads or large inductive motors, compressors and other loads with high start-up currents.
- **Remote Control:** Inverter/Charger can be operated conveniently from a remote location. Sold separately.
- **Warranty Service:** Backed by a two-year product warranty and a rapid-response repair/replacement policy that's unmatched in the industry.

NOTE: To protect against high current draw that may occur during inverter failure, a fuse link rated at 200a should be positioned no more than 18" from the APS1012SW's battery in the positive line.

Features

- **Pure Sine Wave Output:** The APS1012SW supplies computer-grade, pure sine wave power to connected components. When connected to an AC source, the unit conditions the power before passing it to equipment. When using battery power, the APS1012SW efficiently converts 12V DC to 120V AC for tools, appliances, pumps, portable lighting and computer equipment.

Highlights

- Heavy-duty, DC-to-AC inverter generates a 120V 60Hz pure sine wave output from a 12V battery bank
- Functions as an extended run UPS, a standalone AC power source or an automotive inverter.
- 12V DC or 120V AC input; 120V, 60 Hz output (hardwired)
- 1000 watts continuous output, 2000 watts peak output. Capable of powering resistive, inductive and motor loads.
- Selectable 4/40 amp, wet/dry cell, high power battery charger
- Unlimited back up time with user supplied batteries

Applications

- Versatile inverter/charger system with seamless transfer switching serves as an automotive inverter for RVs, over-the road trucking, conversion vans and fleet service vehicles
- Standalone alternative power source for off-grid, alternative energy or export applications
- Uninterruptible power supply (UPS) for items compatible with a 16 millisecond transfer time.

Package Includes

- APS1012SW inverter/charger
- Instruction manual with warranty information



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- **Extended Peak Surge Power Capability:** Many tools, appliances and printers require extra power for start-up. Others devices, like refrigerators and pumps, have fluctuating power demands. The APS1012SW accommodates peak surge demands when operating in inverter mode by providing up to 200% more output power than its 1000-watts continuous rating, so ample reserve power keeps tools and equipment running longer. In DoubleBoost mode, the APS1012SW can deliver 2000 watts to support energy-intensive equipment start-ups and motor cycling requirements. Since it is designed to work in heavy load conditions, de-rating is unnecessary.
- **Overload Protection:** To prevent damage to the inverter and connected equipment, the APS1012SW shuts down automatically if an overload is detected at the AC output connection. Additional overload protection is provided by a 15-amp AC input circuit breaker, a 15-amp AC output circuit breaker, and a built-in two-speed cooling fan.
- **Auto-Transfer Switching for UPS Operation:** When the APS1012SW is connected to an AC power source, power is passed to connected equipment while the battery bank charges via a three-stage, 4/40-amp selectable charger with adjustable settings for wet/gel battery types. In the event of a power failure or severe voltage fluctuation, the APS1012SW responds with a near-instantaneous (16.6 millisecond) automatic transfer to battery power.
- **Extended Battery Options:** Any number of user-supplied batteries may be connected to the APS1012SW to provide extended battery backup support for critical equipment.
- **Simple Installation:** The APS1012SW features integral mounting slots for permanent installation on any rigid, horizontal surface, such as the bed of a pickup truck. Connecting it to a battery system is quick and easy with readily available user-supplied cables. A grounding lug connects the inverter/charger to earth ground or vehicle grounding system. AC input power and AC output power for connected equipment is provided via a hardwire junction box.
- **Dip Switch Configuration:** Configuring dip switches support wet/gel battery charging profiles; adjustable high voltage auto transfer during overvoltages; selectable AC low voltage auto transfer during brownouts; four levels of charger limiting relative to output load size; a battery equalization program and battery charger low/high settings.
- **Rugged Enclosure Design:** Encased in a rugged, moisture-resistant, powder-coated steel housing, the APS1012SW withstands vibration, impact and high-humidity environments.
- **Optional Remote Control Capability:** The APS1012SW is equipped with an RJ45 port for connection of an optional Remote Control LED/Switch Module (Tripp Lite model APSRMSW, sold separately), enabling users to control and monitor the inverter/charger from virtually anywhere within a vehicle.
- **Optional Battery Sensing Prolongs Battery Life:** The APS1012SW is equipped with an RJ11 port for the connection of an optional Battery Temperature-Sensing Cable (sold separately) that prolongs battery life by adjusting the charge float voltage level based on battery temperature.

Specifications

General Info	
Product Group	POWER INVERTERS
OVERVIEW	
Intended Application	Emergency Backup Power



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OUTPUT	
Frequency Compatibility	50 / 60 Hz
Output (Watts)	1000
Continuous Output Capacity (Watts)	1000
Peak Output Capacity (Watts)	2000
Output Nominal Voltage	120V
Output Voltage Regulation	LINE POWER (AC): Maintains 120V nominal sine wave output. INVERTER POWER (AC): Maintains sine wave output voltage of 120-150VAC (+/-5%). DC CHARGER OUTPUT (See battery recharge rate section)
Output Frequency Regulation	60 Hz (+/- 0.3 Hz)
Overload Protection	Includes 15A input breaker dedicated to the charging system and 15A output breaker for AC output loads
Outlet Quantity / Type	Hardwire
INPUT	
Nominal Input Voltage(s) Supported	120V AC
Recommended Electrical Service	DC INPUT: Requires 12VDC input source capable of delivering 120A for the required duration (when used at full continuous capacity). For automotive applications, professional hardwire installation with 225A minimum battery system fusing is recommended.
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 120A at 12VDC. AC INPUT: 15 amps at 120VAC with full inverter and charger load.
Input Connection Type	DC INPUT: Set of 2 DC bolt-down terminals. AC INPUT: Hardwire
Voltage Compatibility (VAC)	120
Voltage Compatibility (VDC)	12
BATTERY	
Expandable Battery Runtime	Runtime is expandable with any number of user supplied wet or gel type batteries
DC System Voltage (VDC)	12
Battery Charge	Includes 4/40 amp DC charging system with selectable profiles for vented wet cell and sealed gel cell batteries.
LEDS ALARMS & SWITCHES	
Audible Alarm	Audible status indicators
Switches	The inverter provides a RJ-45 port for optional APSRMSW remote control. RJ45 port operates with standard RJ485 interface (APSRMSW sold separately)
Front Panel LEDs	Set of front panel LED's display inverter status, charger status, as well as battery voltage status
PHYSICAL	
Unit Dimensions (hwd / in.)	7.25 x 8.75 x 18
Unit Dimensions (hwd / cm)	18.41 x 22.22 x 45.72
Unit Weight (lbs.)	35.5



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Unit Weight (kg)	16.10
Cooling Method	Fan
Material of Construction	Powder coated Steel
Form Factors Supported	Mounting slots enable permanent placement of inverter on any horizontal surface (see manual for additional mounting information)
ENVIRONMENTAL	
Relative Humidity	0-95% non-condensing
SPECIAL FEATURES	
Appearance	gray color
Remote Control Capability	Yes
WARRANTY	
Product Warranty Period (U.S. & Canada)	2-year limited warranty
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	2-year limited warranty
Product Warranty Period (Puerto Rico)	2-year limited warranty

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