

Position a 400A fuse link less than 18 in. from the battery in the positive line to protect against high-current draw that may occur during inverter failure.

## 2000W PowerVerter APS 12VDC 120V Inverter/Charger with Pure Sine-Wave Output, Hardwired

MODEL NUMBER: **APS2012SW**



### Highlights

- Delivers pure sine-wave 120V AC power from AC or DC source
- 2000W continuous output power; 4000W peak power
- Auto-transfer switching option for UPS operation
- Protects against blackouts, surges and EMI/RFI line noise
- Rugged polycarbonate housing resists moisture and impact

### Package Includes

- APS2012SW 2000W PowerVerter APS 12V DC 120V AC Inverter/Charger
- Owner's manual

### Description

The APS2012SW 2000W PowerVerter APS 12V DC 120V AC Inverter/Charger is a reliable power source for a wide variety of power tools, computers, audio/video components and other sensitive electronics at mobile, emergency and remote sites. With no fumes, fuel or excess noise, it's an excellent alternative to generator power.

The DC-to-AC pure sine-wave inverter delivers network-grade power to sensitive electronics. Its automatic line-to-battery transfer switch and integrated charging system allow the unit to work as a vehicle inverter, standalone AC power source or extended-run UPS. It delivers 2000W of continuous power or 4000W of peak power up to 10 seconds during equipment startup or cycling. An automatic overload detector, cooling fan and resettable AC circuit breakers protect the unit from damage.

Designed for easy installation in RVs, commercial and fleet vehicles and emergency vehicles, the APS2012SW converts stored power from any 12V battery or automotive DC source to safe, stable, computer-grade AC power for unlimited runtime. When hardwired to an external 120V AC source, the unit keeps the user-supplied battery charged via a three-stage 6/60A selectable charging system while simultaneously delivering AC power to connected equipment.

When used as a UPS, the APS2012SW responds to blackouts and brownouts with an automatic, instantaneous transfer to battery-derived AC output. LEDs on the unit indicate battery voltage, charger and inverter status.

### Features

#### Reliable Power for Mobile, Emergency and Remote Sites

- Generates 120V pure sine-wave power from 12V battery bank
- Ideal for powering variable-speed tools, computers, LEDs, fans, audio/video components and other sensitive electronics
- Designed for easy installation in RVs, commercial and fleet vehicles, emergency vehicles and construction equipment
- Functions as vehicle inverter, standalone AC power source or extended-run UPS



- Unlimited runtime with variety of user-supplied batteries

#### Pure Sine-Wave Power for Normal and Peak Power Demands

- 2000W of continuous power
- 4000W of peak power up to 10 sec. to accommodate surge power demands during equipment startup and cycling
- Automatic overload detector, built-in cooling fan and resettable AC circuit breakers protect unit from damage
- High-current DC input terminals for simple hardwired installation

#### Automatic Transfer Switching

- Transfer relay switches to inverter power during blackout in 16 ms

#### 3-Stage 6/60A Selectable Battery Charger

- Serves as battery charger when external 120V AC power is supplied and powering connected equipment
- Protects battery from overcharging and overdischarging
- Low-battery protection prevents excessive battery depletion
- DIP switches configure wet/gel charging profiles

#### External Ports

- Battery temperature port allows connection of optional remote battery temperature sensor, such as Tripp Lite's [APSSWTEMP](#)
- RJ45 communication port allows connection of optional remote control module, such as Tripp Lite's [APSRMSW](#)

#### Front-Panel LEDs

- Indicate battery voltage, charger and inverter status

#### Rugged Steel Housing

- Resists moisture, vibration and impact
- Built-in mounting feet for installation on any rigid horizontal surface

## Specifications

OUTPUT	
Nominal Output Voltage(s) Supported	120V
Frequency Compatibility	50 / 60 Hz
Output Receptacles	Hardwire
Output (Watts)	2000
Continuous Output Capacity (Watts)	2000
Peak Output Capacity (Watts)	4000
Output Voltage Regulation	LINE POWER (AC): Maintains 120V nominal sine wave output from line power source. INVERTER POWER (AC): Maintains sine wave output voltage of 120 VAC (+/-5%).
Output Frequency Regulation	50/60 Hz (+/- 0.3 Hz)
Overload Protection	Includes 25A input breaker dedicated to the charging system and 25A output breaker for AC output loads



INPUT	
Nominal Input Voltage(s) Supported	120V AC
Recommended Electrical Service	DC INPUT: Requires 12VDC input source capable of delivering 250A for the required duration (when used at full continuous capacity - DC requirements increase during OverPower and DoubleBoost operation). For automotive applications, professional hardwire installation with 400A minimum battery system fusing is recommended.
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 250A at 12VDC. AC INPUT: 27 amps at 120VAC with full inverter and charger load (8.7A max charger-only / combined input load to support charger and AC output is automatically controllable to 66%-33%-0% based on AC output loading using the charger limiting set points - see manual for setting instructions)
Input Connection Type	DC INPUT: Set of 2 DC bolt-down terminals. AC INPUT: Hardwire via built in junction box with cover plate
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 Pack Accessory (Optional)	<a href="#">98-121</a> sealed lead acid battery(optional)
Battery Charge	Selectable 6 to 60 amp
Expandable Runtime	Yes
VOLTAGE REGULATION	
Overvoltage Correction	Overvoltage transfer point - 135V (+/- 3%)
Brownout Correction	Brownout transfer point - 85V (+/- 3%)
USER INTERFACE, ALERTS & CONTROLS	
Front Panel LEDs	Display inverter status, charger status as well as battery voltage status
Switches	The inverter provides an RJ-45 port for optional <a href="#">APSRMSW</a> retmote control. RJ-45 port operates with standard RS-485 interface( <a href="#">APSRMSW</a> sold separately)
Audible Alarm	Audible Status indicators (see manual)
PHYSICAL	
Shipping Weight (lbs.)	55.6
Shipping Weight (kg)	25.22
Unit Dimensions (hwd / in.)	7.25 x 8.75 x 21.75
Unit Dimensions (hwd / cm)	18.41 x 22.22 x 55.24
Unit Weight (lbs.)	49.5
Unit Weight (kg)	22.45
Cooling Method	Multi-speed fan
Material of Construction	Powder coated steel



Receptacle Color	Gray
Form Factors Supported	Mounting slots enable permanent placement of inverter on any horizontal surface (see manual for additional mounting information)
<b>ENVIRONMENTAL</b>	
Relative Humidity	0-95% non-condensing
Operating Elevation (ft.)	0-1500 meters -20 - +40 degrees C 1501-3000 meters -20 - +35 degrees C
Operating Elevation (m)	0-1500 meters -20 - +40 degrees C 1501-3000 meters -20 - +35 degrees C
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time (Line Power to Battery Mode)	16 milliseconds max
Low Voltage Transfer to Battery Power	In AC "auto" mode, inverter/charger switches to battery mode as line voltage drops to 85V (user adjustable to 95V - see manual)
High Voltage Transfer to Battery Power	In AC "auto" mode, inverter/charger switches to battery mode as line voltage increases to 135V
<b>SPECIAL FEATURES</b>	
Remote Control Capability	Yes
<b>WARRANTY</b>	
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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