

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

### MODEL NUMBER: APS2012SW









#### Description

Provide Pure Sine Wave power to trucks, boats, remote job sites or emergency/backup power applications with the Tripp Lite APS2012SW DC-to-AC Inverter/Charger. Featuring an automatic line-to-battery transfer switch and an integrated charging system, this inverter/charger can operate as an extended-run UPS, a standalone power source or an automotive inverter. The APS2012SW can supply 2000 watts of continuous 120V AC power from any 12V battery or automotive DC source. It supports an unlimited amount of runtime with any number of user-supplied batteries. Its heavy-duty, 3-stage, selectable, 6/60amp, wet/dry cell battery charger will properly charge your vehicle battery or separate battery bank. Since many power tools, appliances and motors require more power at startup or during cycling, the APS2012SW is designed to deliver up to 200% of its continuous output rating (4000W of peak power) for up to 10 seconds to accommodate this peak power demand. A reliable large transformer design with frequency control makes it capable of powering resistive electronic loads as well as inductive loads such as motors, compressors, pumps, heavy-duty power tools and other appliances. When a

#### Highlights

- 12V DC or 120V AC input; 120V, 50/60 Hz output (hardwired)
- 2000 watts continuous output, 4000 watts peak output
- Selectable 6/60 amp wet/dry cell
  battery charger
- Pure sine wave output
- Quiet, high efficiency operation, high surge capacity and low idle current
- Seamless transfer switching

#### Applications

 Versatile inverter/charger system with seamless transfer switching serves as an automotive inverter for over-the-road trucking, conversion vans and fleet service vehicles; a standalone alternative power source for off-grid, alternative energy or export applications and as an uninterruptible power supply (UPS) for items compatible with a 8-12 millisecond transfer time.

#### Package Includes

- APS2012SW Inverter/Charger
- Instruction manual with warranty information

120V AC cable is connected to the APS2012SW, it functions as a UPS with utility power passing through the unit to connected equipment while the battery pack is being recharged. In UPS mode, the APS system responds to blackouts and voltage fluctuations with a near instantaneous, automatic transfer to provide reliable battery backup power to connected equipment. A set of high current DC input terminals is included for simple, hardwired installation. (See the owner's manual for recommendations on installing user-supplied batteries and cabling.) For a remote inverter on/off switching capability, an optional remote power switch module with full status LEDs is available for installation (APSRM4 sold separately).

NOTE: To protect against high current draw that may occur during inverter failure, a fuse link rated at 400A should be positioned no more than 18 in. from the APS2012SW's battery in the positive line.

#### Features

- Pure sine wave output
- Continuous output inverter and high power battery charger
- Quiet, high efficiency operation, high surge capacity and low idle current



- Supply energy to various loads such as resistive load
- Seamless transfer switching
- Load sensing adjustable
- Unlimited back up time with user supplied batteries

# Specifications

Battery Charge

OVERVIEW		
Style	Heavy-duty with built-in battery charger	
OUTPUT		
Frequency Compatibility	50 / 60 Hz	
Output Receptacles	Hardwire	
Output (Watts)	2000	
Continuous Output Capacity (Watts)	2000	
Peak Output Capacity (Watts)	4000	
Output Nominal Voltage	120V	
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 15A input breaker dedicated to the charging system and 15A 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)	98-121 sealed lead acid battery (optional)	

Selectable 6 to 60 amp



E.

Overvoltage Correction	Overvoltage transfer point - 135V (+/- 3%)
Brownout Correction	Brownout transfer point - 85V (+/- 3%)
LEDS ALARMS & SWITCHES	
Audible Alarm	Audible Status indicators (see manual)
Switches	The inverter provides an RJ-45 port for optional APSRMSW retmote control. RJ-45 port operates with standard RS-485 interface (APSRMSW sold separately)
Front Panel LEDs	Display inverter status, charger status as well as bettery voltage status
PHYSICAL	
Shipping Weight (Ibs.)	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 (Ibs.)	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)
ENVIRONMENTAL	
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
LINE / BATTERY TRANSFER	
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
SPECIAL FEATURES	
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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