



**Tripp Lite**  
1111 W. 35th Street  
Chicago, IL 60609 USA  
Telephone: 773.869.1234  
www.tripplite.com

# PowerVerter APS Inverter/Charger - Reliable Power Source for Uninterruptible Emergency Backup Applications

MODEL NUMBER: **APS512**

## Description

Tripp Lite's APS512 3-function DC-to-AC inverter with auto line-to-battery transfer and integrated charging system serves as an extended run UPS, a standalone power source or an automotive inverter. Supplies up to 500 watts of continuous 120V AC power to 2 AC outlets from any 12V battery or automotive DC source. When AC cable is connected to a live wall socket, commercial power passes through to connected equipment and the battery set is recharged via 3 stage, 18 amp charging system. In UPS mode, the APS system responds to blackouts and brownouts with an uninterrupted transfer to battery-derived AC output. Includes a set of high current DC input terminals for simple installation (user supplies batteries and cabling). Reliable large transformer design with efficient PWM sine wave output and frequency control powers resistive electronic loads or large inductive motors, compressors and other items with high current needs on startup. Supports an unlimited amount of runtime with any number of user-supplied batteries connected. Highly adaptable to a variety of applications and site conditions with adjustable charger settings for wet/gel battery types and selectable line to battery power transfer voltages. PowerVerter APS Inverters accommodate "peak surge" demands by delivering more output power than their continuous rating. Compare the "Continuous" and "Peak Surge" wattage ratings, and you'll find PowerVerter Plus Inverters supply up to double their output to easily handle equipment start up and motor cycling requirements. A DoubleBoost feature provides up to 200% of the continuous output for up to 10 seconds, providing the extra power needed to cold start heavy-duty tools and equipment. An OverPower feature delivers up to 150% of the continuous output for up to 1 hour.

## Features

- Functions as an extended run UPS system, standalone power source and automotive inverter
- Includes AC input cord and auto-transfer to enable battery charging and automatic UPS support for blackouts & brownouts
- 500 watts continuous output power; provides up to twice this rating for momentary startup of inductive loads
- Battery runtime is dependent upon the size and number of user-supplied 12-volt batteries used
- 2 outlets; 6-ft. AC power cord; DC input terminals for 12V battery connection
- Converts 12 volt DC to 120 volt AC
- Frequency control for operating stability
- Advanced 18 amp, 3-stage battery charger and selector switch for gel or wet cell batteries
- Resettable circuit breaker protects APS against system overload
- Switch allows user to select between off, auto-invert and charge-only settings
- 6 diagnostic LEDs indicate AC present, on battery, overload, & battery voltage level (high, medium, & low)
- Configuration switches to allow the user to select the high and low voltage for the unit to automatically transfer from AC power to battery backup
- Coated internal circuit boards offer continuous operation in humid environments (0-95%, non condensing)
- 3.5mm port for connecting remote switch (User supplies plug, cable and switch - see manual)
- Allows unlimited runtime capability by allowing the use any number of user-supplied batteries

## Highlights

- 12V DC input; 120V AC output; 2 outlets
- 500 watts continuous output
- 1000 watts peak surge output for an extended period
- Advanced battery charger
- Fast load switching with less transfer time

## Package Includes

- APS512 Inverter/Charger
- Instruction manual with warranty information



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## Specifications

OVERVIEW	
UPC Code	037332090232
OUTPUT	
Frequency Compatibility	60 Hz
Output (Watts)	Continuous - 500 watts, Overpower (up to 1 hour) - 750 watts, Double-Boost wattage (up to 10 seconds) - 1000 watts
Output Nominal Voltage	AC OUTPUT: 120V AC nominal, DC CHARGER OUTPUT (DC): 12V DC nominal
Output Voltage Regulation	LINE POWER (AC): Maintains 120V nominal sine wave output. INVERTER POWER (AC): Maintains PWM sine wave output voltage of 120 VAC (+/-5%). DC CHARGER OUTPUT (See battery recharge rate section)
Output Frequency Regulation	60 Hz (+/- 0.3 Hz)
Overload Protection	Circuit breaker
INPUT	
Recommended Electrical Service	DC INPUT: Requires 12V DC input source capable of delivering 50A for the required duration (when used at full continuous capacity). For automotive applications, professional hardwire installation with 100A battery system fusing is recommended. AC INPUT
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 50A at 12VDC, No load - 2.2A at 12V DC. AC INPUT: 8 amps at 120V AC with full inverter and charger load
Input Connection Type	DC INPUT: Set of 2 DC input wingnut terminals. AC INPUT: NEMA 5-15P input plug
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)	15
Battery Pack Accessory (Optional)	<a href="http://www.tripplite.com/12VDC-Sealed-Maintenance-Free-Battery-All-Inverter-Chargers-12VDC-Battery-Connections~98-121">98-121</a> sealed lead acid battery (optional)
Battery Charge	Includes 20 amp DC charging system
USER INTERFACE, ALERTS & CONTROLS	
Front Panel LEDs	Set of 6 LEDs offer continuous status information on load percentage (6 levels reported) and battery charge level (7 levels reported). See manual for sequences.
Switches	Lighted on/off power switch, plus 2 conductor 3.5 mm port for connecting remote switch - user supplies switch, 3.5mm plug and cable.
PHYSICAL	
Cooling Method	Convection



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Material of Construction	Polycarbonate
Shipping Dimensions (hwd / cm)	29.21 x 22.22 x 23.81
Shipping Dimensions (hwd / in.)	11.50 x 8.75 x 9.37
Shipping Weight (kg)	7.62
Shipping Weight (lbs.)	16.80
Unit Dimensions (hwd / cm)	17.1 x 16.5 x 24.8
Unit Dimensions (hwd / in.)	6.75 x 6.5 x 9.75
Unit Weight (kg)	7.26
Unit Weight (lbs.)	16
<b>ENVIRONMENTAL</b>	
Relative Humidity	0-95% non-condensing
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time (Line Power to Battery Mode)	4-6 milliseconds
Low Voltage Transfer to Battery Power	User configurable to 75V, 90V, 95V & 105V
High Voltage Transfer to Battery Power	User configurable to 135V, 145V
<b>WARRANTY</b>	
Product Warranty Period (Worldwide)	1-year limited warranty

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Tripp Lite uses primary and third-party agencies to test its products for compliance with standards. See a list of Tripp Lite's testing agencies:

<https://www.tripplite.com/products/product-certification-agencies>