



**Tripp Lite**  
1111 W. 35th Street  
Chicago, IL 60609 USA  
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## PowerVerter APS Inverter/Charger - Reliable Alternate Power Source

MODEL NUMBER: **APS612**

### Description

Tripp Lite's APS612 3-function DC-to-AC inverter with automatic 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 600 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, 20 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 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

- 600 watts continuous output power; provides up to twice this rating for momentary startup of inductive loads
- 2 outlets; 6 ft. AC power cord; DC input terminals for 12V battery connection
- Converts 12V DC to 120V AC
- Frequency control for operating stability
- Coated internal circuit boards offer continuous operation in humid environments (0-95%, non-condensing)
- Advanced 18 amp, 3-stage battery charger and selector switch for gel or wet cell batteries
- 6 diagnostic LEDs indicate AC present, on battery, overload & battery voltage level (high, medium & low)
- Functions as an extended run UPS system, standalone power source and automotive inverter
- Battery runtime is dependent upon the size and number of user-supplied 12-volt batteries used
- Includes AC input cord and auto-transfer to enable battery charging and automatic UPS support for blackouts & brownouts
- RJ45 port allows connection of APS/PowerVerter Remote Switch (manuf# [APSRM4](#))
- Switch allows user to select between off, auto-invert and charge-only settings
- 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
- Resettable circuit breaker protects APS against system overload

## Specifications

### Highlights

- 12V DC input; 120V AC output; 2 outlets
- 600 watts continuous output
- 1200 watts peak output for an extended period
- 3-stage, built-in battery charger
- Fast load switching with millisecond transfer time

### Applications

- Automotive connect to an automotive battery system to run power tools, computers, electronic test equipment, home entertainment and other AC appliances in utility fleet service vehicles, over-the-road trucks, campers, RVs, minivans and more.
- Standalone power alternative power source for use in off-grid, backwoods, alternative energy and export applications where commercial power is not continuously available.
- Extended run UPS configure as a UPS for long-term battery support of telecom systems, security alarms, computer systems and various other motorized and electronic loads.

### Package Includes

- APS612 Inverter/Charger
- Instruction manual with warranty information



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OUTPUT	
Frequency Compatibility	60 Hz
Output (Watts)	Continuous - 600 watts, Overpower (up to 1 hour) - 900 watts, Double-Boost wattage (up to 10 seconds) - 1200 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 V AC (+/-5%). DC CHARGER OUTPUT (See battery recharge rate section)
Output Frequency Regulation	60 Hz (+/- 0.3 Hz)
Overload Protection	Includes 6A input breaker dedicated to the charging system and 6A output breaker for AC output loads
Outlet Quantity / Type	Includes 2 AC outlets (NEMA 5-15R)
INPUT	
Recommended Electrical Service	DC INPUT: Requires 12V DC input source capable of delivering 56A for the required duration (when used at full continuous capacity). For automotive applications, professional hardwire installation with 100A minimum battery system fusing is recommended.
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 56A at 12V DC. AC INPUT: 9.2 amps at 120VAC with full inverter and charger load
Input Connection Type	DC INPUT: Set of 2 DC bolt-down 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="#">98-121</a> sealed lead acid battery (optional)
Battery Charge	Includes 20 amp DC charging system with selectable profiles for vented wet cell and sealed gel cell batteries (see manual for detailed charger information)
LEDs ALARMS & SWITCHES	
Switches	3 position on/off/remote switch enables simple on/off power control plus "auto/remote" setting that enables distant on/off control of the inverter system when used in conjunction with optional <a href="#">APSRM4</a> accessory when used in inverter mode. In AC uninterruptible power mode, "auto/remote" setting enables automatic transfer from line power to battery power - to maintain continuous AC power to connected loads.
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.
PHYSICAL	
Shipping Dimensions (hwd / in.)	12.5 x 14 x 10.5
Shipping Dimensions (hwd / cm)	31.8 x 35.6 x 26.7
Shipping Weight (lbs.)	18



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Shipping Weight (kg)	8.2
Unit Dimensions (hwd / in.)	7 x 8.75 x 7.75
Unit Dimensions (hwd / cm)	17.8 x 22.2 x 19.7
Unit Weight (lbs.)	16
Unit Weight (kg)	7.3
Cooling Method	Fan
Material of Construction	Polycarbonate
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
<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, 85V, 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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