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## Model #: APS1012

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

#### Highlights

- 12V DC input; 120V AC output
- 2 outlets
- 1000 watts continuous output
- 2000 watts peak output for extended period
- Advanced battery charger
- Fast load switching with less transfer time

#### Description

Tripp Lite's APS1012 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 1000 watts of continuous 120V AC power to 2 AC outlets from any 12V battery or automotive DC source.

PowerVerter APS Inverter chargers accommodate peak surge demands by delivering more output power than their continuous rating. PowerVerter APS 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. 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, 14/55 amp selectable 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.

#### Applications

- 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.
- Standalone Power - Alternative power source for use in off-grid, backwoods, alternative energy and export applications where commercial power is not continuously available.
- Automotive - Connect to an automotive electrical system to run power tools, computers, electronic test equipment, home entertainment and other AC appliances in fleet service vehicles, over-the-road trucks, campers, RVs, minivans and more.

#### Package Includes

- APS1012 Inverter/Charger
- Instruction manual with warranty information

#### 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 and brownouts
- 1000 watts continuous output power; 2000 watts power for up to 10 seconds; 1500 watts power for up to an hour

- 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 12V DC to 120V AC
- Frequency control for operating stability
- Advanced 14/55 amp selectable, 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)
- RJ45 port allows connection of APS/PowerVerter Remote Switch (manuf# [APSRM4](#))

## Specifications

OUTPUT	
Frequency compatibility	60 Hz
Output watts	Continuous - 1000 watts, Overpower (up to 1 hour) - 1500 watts, Double-Boost wattage (up to 10 seconds) - 2000 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	Includes 12A input breaker dedicated to the charging system and 12A 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 95A 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 - 95A at 12V DC. AC INPUT: 12.1 amps at 120V AC 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)

<b>Battery recharge rate</b>	Includes selectable 14 / 55 amp DC charging system with selectable profiles for vented wet cell and sealed gel cell batteries. Optional use battery equalize charge function equalizes the charge level when used with multiple batteries (see manual for detailed charger information).
<b>LEDS ALARMS &amp; SWITCHES</b>	
<b>Switches</b>	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.
<b>Front panel LEDs</b>	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.
<b>PHYSICAL</b>	
<b>Shipping weight (lbs)</b>	31.4
<b>Shipping weight (kg)</b>	14.3
<b>Cooling method</b>	Fan
<b>Unit Dimensions (HWD/in)</b>	7.25 x 8.5 x 16.25
<b>Unit Dimensions (HWD/cm)</b>	18.4 x 21.6 x 41.3
<b>Shipping Dimensions (HWD/in)</b>	13.5 x 15 x 21.5
<b>Shipping Dimensions (HWD/cm)</b>	34.3 x 38.1 x 54.6
<b>Unit weight (lbs)</b>	26.8
<b>Unit weight (kg)</b>	12.16
<b>Material of construction</b>	Polycarbonate
<b>Form factors supported</b>	Mounting slots enable permanent placement of inverter on any horizontal surface (see manual for additional mounting information)
<b>ENVIRONMENTAL</b>	
<b>Relative Humidity</b>	0-95% non-condensing
<b>LINE / BATTERY TRANSFER</b>	
<b>Transfer time from line power to battery mode</b>	4-6 milliseconds
<b>Low voltage transfer to battery power</b>	User configurable to 75V, 85V, 95V & 105V
<b>High voltage transfer to battery power</b>	User configurable to 135V, 145V
<b>SPECIAL FEATURES</b>	
<b>Appearance</b>	Black color
<b>Load Sensing</b>	Optional load sense function enables automatic inverter shutoff and startup as connected equipment is powered off and on. Front panel load sense potentiometer can be set to shutoff or turn on inverter power in response to loads of any level, up to 150 watts.

**WARRANTY****Product Warranty  
Period (U.S.,  
Canada & Puerto  
Rico)**

1-year limited warranty

More information, including related products, owner's manuals, and additional technical specifications, can be found online at

[www.tripplite.com/en/products/model.cfm?txtModelID=176](http://www.tripplite.com/en/products/model.cfm?txtModelID=176).

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