

PowerVerter APS Inverter/Charger

Reliable Power Source for Uninterruptible Emergency Backup Applications



Model #: APS512

- ▶ 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

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.

KEY BUYING POINTS

- 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

TYPICAL 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.

OPTIONS & ACCESSORIES

- Battery - 12 volt / 75 amp-hour (98-121)
- Battery Cabinet holds 2 batteries; includes cabling (BP260)

PACKAGE INCLUDES

- APS512 Inverter/Charger
- Instruction manual with warranty information

COMPLETE SPECIFICATIONS

SYSTEM OVERVIEW	
System overview:	Reliable 12V DC to 120V AC
Voltage compatibility:	12V DC / 120V AC
Frequency compatibility:	60 Hz
OUTPUT	
Output watt capacity (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)
Outlet quantity / type:	Includes 2 AC outlets (NEMA 5-15R)
Overload protection:	Circuit breaker
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
Input cord length:	DC INPUT: User supplies cabling. 4 gauge or larger recommended. AC INPUT: attached 6 ft. AC line cord with plug
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: 120V AC
BATTERY	
DC system voltage:	DC input operating range 10-15V DC.
Battery recharge rate:	Includes 20 amp DC charging system
Expandable battery runtime:	Runtime is expandable with any number of user supplied wet or gel type batteries
LEDS ALARMS & SWITCHES	
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.

SURGE / NOISE SUPPRESSION	
AC surge suppression:	AC surge suppression not included
PHYSICAL	
Shipping weight (lbs):	16.8
Shipping weight (kg):	7.6
Unit weight (lbs):	16
Unit weight (kg):	7.3
Unit Dimensions (HWD/in):	6.75 x 6.5 x 9.75
Unit Dimensions (HWD/cm):	17.1 x 16.5 x 24.8
Shipping Dimensions (HWD/in):	11.5 x 8.75 x 9.375
Shipping Dimensions (HWD/cm):	29.2 x 22.22 x 23.8
Material of construction:	Polycarbonate
Cooling method:	Convection
ENVIRONMENTAL	
Operating Temperature:	32-104 Fahrenheit / 0-40 Celcius
Relative Humidity:	0-95% non-condensing
LINE / BATTERY TRANSFER	
Transfer time from 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
WARRANTY	
Product warranty:	1 year (Outside the U.S. and Canada, call for warranty information)
SPECIAL FEATURES	
Appearance:	Black color
BATTERY PACK ACCESSORY (optional)	
Battery Pack Accessory (optional):	98-121 sealed lead acid battery (optional)

*The policy of Tripp Lite is one of continuous improvement.
Specifications are subject to change without notice.
Therefore, your product may vary slightly from what is currently listed.*



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