

# PowerVerter APS DC-to-AC Inverter/Chargers

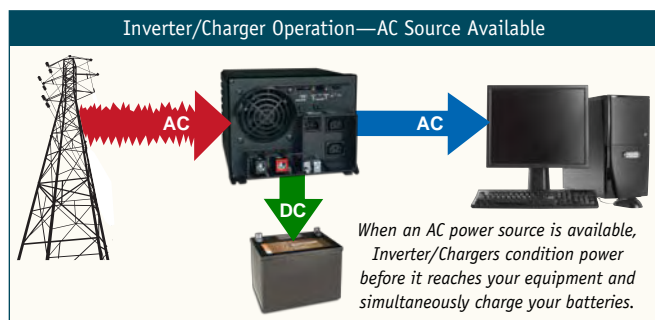


- ▶ 700 – 6 000 Watts Continuous Power
- ▶ 1 400 – 12 000 Watts Peak Power
- ▶ Automatic Transfer from AC Source to Reliable Battery Backup Power
- ▶ Protection Against Blackouts, Surges, Line Noise & Unsafe Voltages
- ▶ Fast & Safe 3-Stage Battery Charger
- ▶ Network Manageable Model Available

## Provide Reliable Backup Power

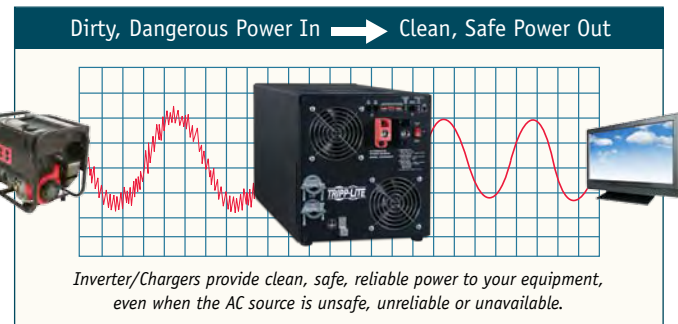
Inverter/Chargers provide mobile power and backup power for generators and other AC power sources. They are especially useful in areas where the utility power grid is unreliable or unavailable.

- When an AC source is available, the Inverter/Charger conditions AC power before passing it to your equipment and simultaneously charges your user-supplied batteries. Built-in battery backup, surge suppression, noise filtering and regulated output voltage protect your equipment, your data and your productivity.
- If an AC source is not available (during power failures, at remote sites, while driving or when your generator is turned off), the Inverter/Charger automatically switches to battery power and your equipment continues to operate without interruption. If an AC source becomes available, the Inverter/Charger automatically switches back to passing AC power to your equipment and recharges your batteries.



## Deliver Superior Output

Inverter/Chargers provide stable output voltage to protect your equipment and help it perform at its peak. When the AC power source generates voltages too high or too low for safe operation, the Inverter/Charger acts as an intermediary, correcting unsafe voltage levels before AC power reaches your equipment. Models with automatic voltage regulation are able to correct voltages without switching to battery, preserving battery backup runtime and reducing battery wear.



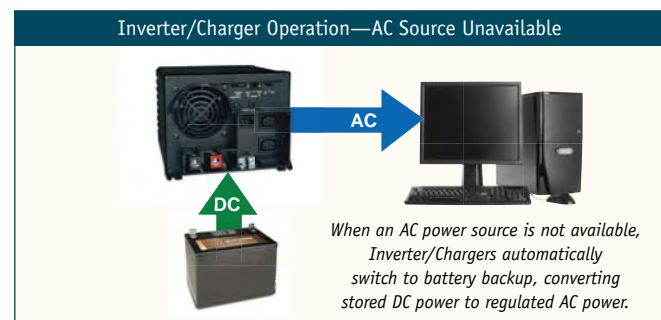
Inverter/Chargers also correct output frequency, allowing sensitive equipment such as computers and electronics to operate without malfunction. When Inverter/Chargers operate from battery power, the AC output is strictly controlled by a microprocessor to provide your equipment with clean, safe, reliable power at all times.

## Manage from Anywhere

Tripp Lite's ASPX6048VRNET Inverter/Charger now includes network manageability features. With the addition of an optional, external SNMP/Web management module (model SNMPWEBSOLOHV), you can remotely monitor and control your Inverter/Charger via Web browser, Network Management System, SNMP, telnet or SSH. In combination with Tripp Lite's FREE PowerAlert software, this feature lets you monitor your Inverter/Charger's operating conditions and control it at the touch of a button, even when you're nowhere near the worksite, giving you full power management ability.



PowerAlert Software



## A AC Outlets or Hardwire AC Output Terminals

Connect the outlets or terminals to your compatible equipment, outlet strip, power distribution unit or electrical panel.

## B Operating Mode Switch

Most Inverter/Charger models have an operating mode switch with three settings: "Auto", "Charge Only" and "Off." Inverters, and some Inverter/Chargers, have an On/Off switch.

## C Battery Level LEDs

The LEDs indicate the approximate charge level—High/Medium/Low—of connected batteries.

## D Operation LEDs

The LEDs indicate whether the Inverter/Charger is supplying power from an AC source or from your batteries. They also indicate whether the connected equipment load exceeds the continuous output rating of the Inverter/Charger.

## E Remote Control Jack

Connect the jack to an optional Remote Control Module (model APSRM4 or APSRMSW, sold separately) to enable remote monitoring and control.

## F Battery Conservation Dial

The dial sets the load level at which the inverter shuts off to conserve battery power. (Included with all models except APSX750, APSX1012SW, APSX1250 and APSX2012SW.)

## G DC Input Terminals

The terminals connect to your batteries with user-supplied cabling. (Inverter model PVINT375 includes an input plug that connects to your vehicle's lighter or accessory outlet.)

## H AC Inlet or Hardwire Terminals

Connect the inlet or terminals to your AC power source to charge connected batteries and pass conditioned AC power to your equipment when available.

## I Configuration DIP Switches

Use the DIP switches to change the Inverter/Charger's settings and optimize operation for your application.

## J Resettable Circuit Breakers

(Inverter model PVINT375 includes a replaceable fuse.)

## K Durable Polycarbonate or Metal Case

## L Integrated Mounting Feet/Flanges

## M Cooling Fan

## N Grounding Lug

(Inverter/Charger models APSX1012SW and APSX2012SW may require specialized grounding procedures.)

## O Automatic Voltage Regulation

Select Inverter/Charger models can correct abnormal voltages without draining battery power, making them ideal for supporting equipment powered by generators and other AC sources that experience frequent voltage fluctuations. (Included with APSX3024SW, APSINT3636VR and APSX6048VRNET only. APSINT3636VR also includes voltage regulation LEDs.)

## P Pure Sine Wave Output

Select Inverter/Charger models include pure sine wave output from battery, making them ideal for supporting the most sensitive electronic equipment, including servers, networking and telecommunications equipment. (Included with APSX1012SW, APSX2012SW, APSX3024SW, APSX6048VRNET and HCRK-INT.)

## Q Fast Transfer Time from AC Source to Battery

Inverter/Charger models with a fast transfer time (½ cycle) are better for supporting computers and network equipment. The fast transfer time ensures that sensitive electronic equipment loads will not be dropped when switching from the AC source to battery power during a power failure. (Included with all Inverter/Charger models except APSINT2012, APSINT2424 and APSINT3636VR.)

## R Remote Battery Temperature Connector

The connector allows for the connection of a battery temperature sensor, which increases the operational lifespan of your batteries by adjusting the charging level based on battery temperature. (Included with APSX1012SW, APSX2012SW, APSX3024SW and APSX6048VRNET. Models APSX1012SW and APSX2012SW require user-supplied cabling.)

## S Remote Generator Controller

The remote generator controller automatically starts or stops your generator to keep your batteries at an optimal charge level. (Included with APSX3024SW and APSX6048VRNET only. A user-supplied cable is required.)

## T Network Communication Connector

This RS-232 serial port allows attachment of an external SNMP/ Web management module (model SNMPWEBSOLOHV) to remotely monitor and control your Inverter/Charger via SNMP, Web, SSH or telnet. (Included with APSX6048VRNET only.)

## U 12V DC Connector

The 12V DC Connector provides power for an external SNMP/Web management module (model SNMPWEBSOLOHV) directly from the unit, eliminating the need for nearby AC outlets. (Included with APSX6048VRNET only. Cable included with SNMPWEBSOLOHV.)

## Low Battery Alarm (internal, not shown)

Automatically detects low battery voltage and shuts down the inverter to prevent battery depletion/damage. (Included with all models.)

## Overload Alarm (internal, not shown)

Automatically detects output overloads and shuts down the inverter to prevent damage. (Included with all Inverter/Charger models.)

### Recommended DC Fuses and Wiring

Model	Recommended DC Fuse	Recommended DC Wire Size (90° C Rated)	Maximum DC Wire Length (Battery to Unit)
APXS750	125A	25 mm <sup>2</sup> (4 AWG) 35 mm <sup>2</sup> (2 AWG) 60 mm <sup>2</sup> (1/0 AWG)	4,8 m 7,9 m 12,8 m
APXS1012SW	200A	35 mm <sup>2</sup> (2 AWG) 60 mm <sup>2</sup> (1/0 AWG)	6,1 m 9,4 m
APXS1250	200A	60 mm <sup>2</sup> (1/0 AWG) 70 mm <sup>2</sup> (2/0 AWG)	7,6 m 9,4 m
APSINT2012	250A	70 mm <sup>2</sup> (2/0 AWG)	6,1 m
APXS2012SW	400A	70 mm <sup>2</sup> (2/0 AWG)	6,1 m
APSINT2424	90A	60 mm <sup>2</sup> (1/0 AWG) 70 mm <sup>2</sup> (2/0 AWG)	15,8 m 19,8 m
APSINT3636VR	175A	60 mm <sup>2</sup> (1/0 AWG) 70 mm <sup>2</sup> (2/0 AWG)	23,7 m 29,8 m
APXS3024SW	2 x 125A	70 mm <sup>2</sup> (2/0 AWG)	15,8 m
APXS6048VRNET	2 x 125A	70 mm <sup>2</sup> (2/0 AWG)	32 m
PVX700	125A	25 mm <sup>2</sup> (4 AWG)	4,8 m

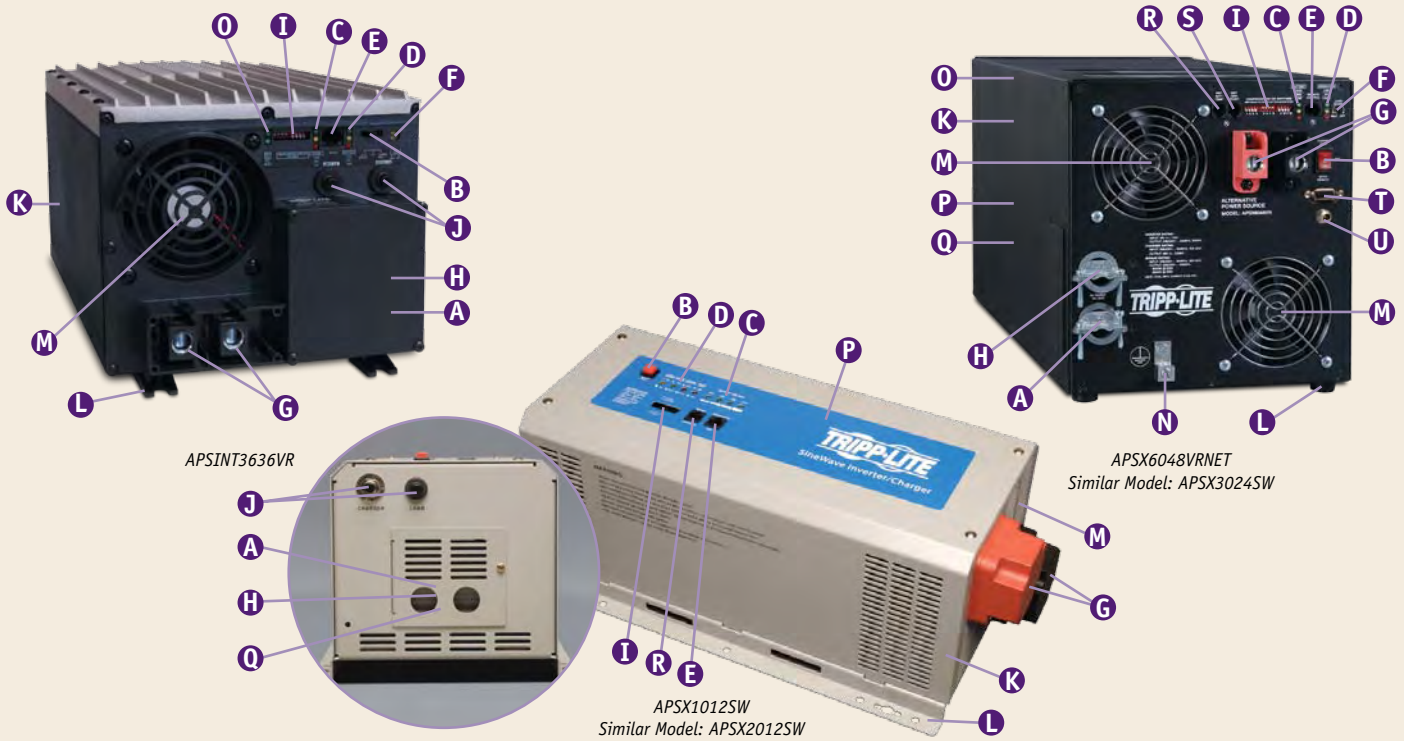
Note: Acceptable power is directly related to cable length—shorter cables yield better performance. Tighten the Inverter/Charger battery terminals to approximately 3.5 Newton-meters of torque to create an efficient connection and avoid excessive heating. The battery system wiring should also incorporate an approved fuse block and fuse (as noted above) within 460 mm of the battery. The Inverter/Charger should be connected to earth or chassis ground with a minimum 10 mm<sup>2</sup> (8 AWG) wire. If the Inverter/Charger will be used in an area with harsh power conditions, Tripp Lite recommends placing a surge suppressor between the Inverter/Charger and the AC source. Contact Tripp Lite for a full line of 230V surge suppressors. These recommendations are presented as guidelines only. All wiring must be performed in accordance with NEC or your local electrical code, as determined by applicable local laws. Consult the product manual for more information about proper installation of the Inverter/Charger.

### PowerVerter DC-to-AC Inverters

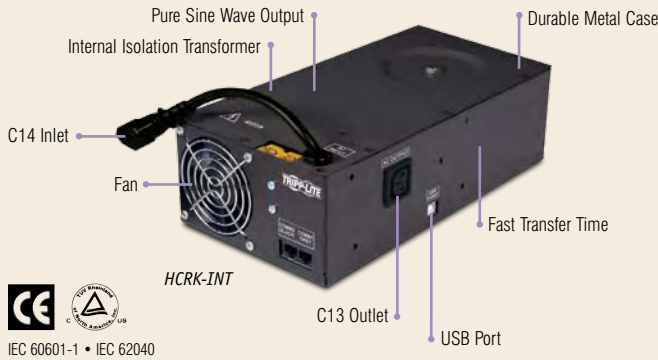
Inverters provide mobile AC power derived from your vehicle's battery. They do not include a battery charger.



PowerVerter APS DC-to-AC Inverter/Chargers



Medical-Grade Inverter/Charger



Mounting Hardware Kit



Remote User Interface



User-Replaceable Battery Module



PowerAlert Data-Saving Software

SPECIFICATIONS



Model	Continuous Output Rating <sup>(A)</sup>	Peak Output Rating <sup>(B)</sup>	AC Outlets	Nominal AC Output Voltage/Frequency	Nominal DC Voltage (Range)	Nominal AC Input Voltage/Frequency	AC Input Connector	Battery Charger Capacity	Transfer Time (AC to Battery) <sup>(G)</sup>	Unit Dimensions (H x W x D)	Shipping Weight
<b>PowerVerter APS Inverter/Chargers</b>											
APSX750	750W	1500W	2 C13 <sup>(C)</sup>	230V/50Hz	12V (10-15V)	230V/50Hz	C14 Inlet <sup>(F)</sup>	20A or 5A <sup>(E)</sup>	½ cycle	178 x 222 x 229 mm	9,1 kg
APSX1250	1250W	2500W	2 C13 <sup>(C)</sup>	230V/50Hz	12V (10-15V)	230V/50Hz	C14 Inlet <sup>(F)</sup>	30A or 7.5A <sup>(E)</sup>	½ cycle	178 x 222 x 229 mm	11,8 kg
APSINT2012	2000W	4000W	Hardwire	230V/50Hz	12V (10-15V)	230V/50Hz	Hardwire	60A or 15A <sup>(E)</sup>	1 cycle	178 x 216 x 356 mm	20,9 kg
APSINT2424	2400W	4800W	Hardwire	230V/50Hz	24V (20-30V)	230V/50Hz	Hardwire	30A	1 cycle	184 x 216 x 413 mm	19,5 kg
APSINT3636VR	3600W	7200W	Hardwire	230V/50Hz	36V (30-45V)	230V/50Hz	Hardwire	30A	1 cycle	178 x 216 x 356 mm	28,6 kg
<b>PowerVerter APS Inverter/Chargers with Pure Sine Wave Output</b>											
APSX1012SW	1000W	2000W	Hardwire	230V/ 50Hz or 60Hz <sup>(E)</sup>	12V (10-15V)	230V/ 50Hz or 60Hz <sup>(E)</sup>	Hardwire	4A to 40A <sup>(E)</sup>	½ cycle	184 x 229 x 457 mm	16,5 kg
APSX2012SW	2000W	4000W	Hardwire	230V/ 50Hz or 60Hz <sup>(E)</sup>	12V (10-15V)	230V/ 50Hz or 60Hz <sup>(E)</sup>	Hardwire	6A to 60A <sup>(E)</sup>	½ cycle	191 x 229 x 572 mm	25,3 kg
APSX3024SW	3000W	6000W	Hardwire	230V/ 50Hz or 60Hz <sup>(E)</sup>	24V (20-30V)	230V/ 50Hz or 60Hz <sup>(E)</sup>	Hardwire	90A or 22,5A <sup>(E)</sup>	½ or 1 cycle <sup>(E)</sup>	256 x 226 x 315 mm	39,5 kg
APSX6048VRNET	6000W	12000W	Hardwire	208V or 230V/ 50Hz or 60Hz <sup>(E)</sup>	48V (42-60V)	208V or 230V/ 50Hz or 60Hz <sup>(E)</sup>	Hardwire	90A or 22,5A <sup>(E)</sup>	½ or 1 cycle <sup>(E)</sup>	256 x 228 x 494 mm	59,5 kg
<b>Medical-Grade Inverter/Charger (Complies with IEC 60601-1 and IEC 62040. Includes Isolation Transformer, 90 Amp-Hour Battery Module, Remote, USB Port and Pure Sine Wave Output.)</b>											
HCRK-INT	300W	750W	1 C13	230V/50Hz	12V (10-15V)	230V/50Hz	C14 Inlet <sup>(F)</sup>	12A	¼ cycle	89 x 152 x 292 mm <sup>(H)</sup> 178 x 216 x 368 mm <sup>(I)</sup>	7,3 kg <sup>(H)</sup> 30,4 kg <sup>(I)</sup>
<b>PowerVerter Inverters (Inverters provide mobile AC power derived from your vehicle's battery. They do not include a battery charger.)</b>											
PVINT375	375W	600W	1 Universal <sup>(D)</sup>	230V/50Hz	12V (10-15V)	N/A	N/A	N/A	N/A	51 x 108 x 197 mm	1,1 kg
PVX700	700W	1400W	1 Universal <sup>(D)</sup>	230V/50Hz	12V (10-15V)	N/A	N/A	N/A	N/A	70 x 126 x 208 mm	2,5 kg

(A) Maximum output power available only when connected batteries are properly charged. (B) Peak output level and duration varies with model, battery condition, charge level, ambient temperature and other factors. Peak output duration for inverter models is instantaneous. (C) Includes an adapter that converts a C13 outlet to a universal outlet compatible with more than 20 plug types, including most household plugs worldwide. (D) Compatible with more than 20 plug types, including most household plugs worldwide. (E) User-selectable. (F) C14 inlet connects to user-supplied input power cord with a region-specific plug. APSX750 and APSX1250 include a detachable 2-meter C13-to-C14 power cord. (G) ½ cycle = 10 milliseconds at 50Hz (nominal), 1 cycle = 20 milliseconds at 50Hz (nominal). (H) Power module. (I) Battery module.

For additional product specifications and the most recent updates, go to [www.tripplite.com](http://www.tripplite.com).