



# Model #: APSX750

## PowerVerter APS X Series Inverter/Charger - with Auto-Transfer Switching



## **Highlights**

12V DC or 230V AC input; 230V, 50 Hz output; 2 AC outlets
750 watts continuous, 1125 watts OverPower and 1500 watts DoubleBoost inverter output (see specifications)

3-stage, selectable 5 / 20 amp, wet/dry cell battery charger
Auto Transfer Switching option for battery backup / UPS operation
Reliability enhanced large-transformer design with protected DC terminals

## **Description**

Tripp Lite's APSX750 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 750 watts of continuous 230V AC power to 2 AC outlets from any 12V battery or automotive DC source. OverPower inverter output feature temporarily provides up to 150% of the continuous output for 1-60 minutes and DoubleBoost inverter output feature delivers up to 200% of the continuous output for up to 10 seconds, providing the extra power needed to cold start heavy-duty tools and motorized equipment. 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, selectable 5/20 amp charging system. In UPS mode, the APS system responds to blackouts and voltage fluctuations with a near instantaneous automatic transfer to battery-derived AC output. Includes a set of high current DC input terminals for simple installation (user supplies batteries and cabling - see owner's manual for recommendations). Passes sine wave utility or generator power during battery charging and UPS line power operation, plus efficient PWM sine wave AC output in inverter and UPS backup modes. Reliable large transformer design, with frequency control powers resistive electronic loads or large inductive motors, compressors and other items with high current needs on startup. Optional APSRM4 wired remote power switch with full status LEDs provides remote power inverter on/off switching and continuous status information (APSRM4 sold separate). 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

Versatile inverter/charger system with auto-transfer switching serves as an automotive inverter for RVs, over-the-road trucking, conversion vans and fleet service vehicles; a standalone alternative power source for off-grid, alternative energy or export applications and as an uninterruptible power supply (UPS) for items compatible with a 20 millisecond transfer time.

#### Package Includes

APSX750 Inverter/Charger Instruction manual with warranty information

#### **Features**

APSX750 serves as an automotive or stationary DC-to-AC inverter with automatic line-to-battery transfer and integrated battery charger Supports 230V AC output from a 230V AC line power source or 12V DC battery source

20 millisecond automatic transfer between line and battery power supports UPS protection during blackouts and voltage fluctuations for

equipment compatible with a one cycle transfer time

750 watts continuous AC output in inverter mode

Double Boost inverter output supports momentary startup loads up to 200% of the continuous rating for up to 10 seconds (see specification chart)

OverPower inverter output supports longer duration overloads to 150% for 1-60 minutes under ideal battery and temperature conditions. (For best results, utilize OverPower usage for as short of a duration as possible, ensure battery bank and cabling is able to provide full nominal DC voltage under load and allow inverter/charger to fully cool before and after OverPower usage.)

3 stage, selectable 5/20 amp battery charger with adjustable settings for wet/gel battery types offers fast, reliable battery recharging

Protected hardwire bolt-down input lugs safely accept heavy gauge input wiring from attached battery bank

Dual C13 output receptacles pass 120V line power or inverter output through to connected equipment

Reliability enhanced large-transformer design with secure mounting flanges and protected DC wiring terminals

Moisture-resistant construction enables vehicular or marine operation in high humidity environments

3 position operating mode switch supports "AUTO" mode to enable automatic transfer between DC and AC modes, CHARGE-ONLY to maintain a full battery charge when AC is present without auto transfer and SYSTEM OFF settings

Set of six front panel LEDs display AC/DC operational modes, overload status, DC voltage level, shutdown status and system fault status Set of 4 configuration dipswitches support wet/gel battery charging profiles, charger enable/inhibit, and selectable 144/163/182/201V AC low voltage auto transfer during brownouts

Set of 4 additional configuration dipswitches support 4 levels of charger limiting relative to output load size, a battery equalization program and battery charger low/high settings

Resettable 3A charger AC input breaker and resettable 4A AC output breaker and automatic 2 speed cooling fan protect the inverter from load and temperature related failures

Grounding lug properly connects the inverter/charger system to earth ground or vehicle grounding system

Automatic overload and thermal shutoff safely turns off inverter as excessive loads or overheating conditions develop

Front panel remote control connector enables remote off/on switching (requires APSRM4 switch accessory). Optional APSRM4 accessory also includes user configurable jacks to support inverter shutoff or startup as a vehicle ignition is engaged

## **Specifications**

SYSTEM OVERVIEW		
Voltage compatibility	12VDC / 230VAC	
Frequency compatibility	50 Hz	
OUTPUT		
Output watts	INVERTER MODE - 750 watts continuous, Double Boost rated to 1500 watts peak (up to 10 seconds). Overpower rating supports longer term overloads to 1125 watts for up to 15 seconds prior to inverter shutoff.	
Output nominal voltage	230VAC nominal	
Output voltage regulation	LINE POWER (AC): Maintains 230V nominal sine wave output from line power source. INVERTER POWER (AC): Maintains PWM sine wave output voltage of 230 VAC (+/-5%).	
Output frequency regulation	50 Hz (+/- 0.3 Hz)	
Outlet quantity / type	Includes 2 AC outlets (IEC320 C13). Includes universal receptacle adapter compatible with multiple international plug sets	
Overload protection	Includes 3A input breaker dedicated to the charging system and 4A output breaker for AC output loads	
Continuous output capacity (watts)	750	
Peak output capacity (watts)	INVERTER MODE - Double Boost rated to 1500 watts peak (up to 10 seconds). Overpower rating supports longer term overloads to 1125 watts for up to 15 seconds prior to inverter shutoff.	
INPUT		
Input connection type	DC INPUT: Set of 2 DC bolt-down terminals. AC INPUT: IEC-320 C14 inlet connection	
Input cord length	DC INPUT: User supplies cabling. 6 gauge or larger (see manual). AC INPUT: IEC-320 C14 inlet, ships with 1.8 m (6 ft.) IEC C13-C14 AC line cord	
Recommended electrical service	DC INPUT: Requires 12VDC input source capable of delivering 72A for the required duration (when used at full continuous capacity - DC requirements increase during Over-Power and Double-Boost operation). For automotive applications, professional hardwire i	

Maximum input amps / watts	DC INPUT: Full continuous load - 72A at 12VDC. AC INPUT: 6.2A at 230VAC with full inverter and charger load (2.2A max charger-only / combined input load to support charger and AC output is automatically controllable to 66%-33%-0% based on AC output loading
BATTERY	
Expandable battery runtime	Runtime is expandable with any number of user supplied wet or gel type batteries
DC system voltage	12 VDC
Battery recharge rate	Selectable 5 / 20 amp
LEDS ALARMS & SWIT	CHES
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	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 APSRM4 accessory when used in inverter mode. In AC uninterrupt
SURGE / NOISE SUPPR	RESSION
AC surge suppression	840 joules AC surge suppression included
PHYSICAL	
Shipping weight (lbs)	20
Shipping weight (kg)	9.1
Shipping Dimensions (HWD/in)	12.5 x 11 x 10.75
Shipping Dimensions (HWD/cm)	31.8 x 27.9 x 27.3
Unit weight (lbs)	18.6
Unit weight (kg)	8.3
Unit Dimensions (HWD/in)	7 x 8.75 x 9
Unit Dimensions (HWD/cm)	17.8 x 22.2 x 22.8
Material of construction	Polycarbonate
Form factors supported	Mounting slots enable permanent placement of APSX750 on any horizontal surface (see manual for additional mounting information)
Cooling method	Multi-speed fan
ENVIRONMENTAL	
Relative Humidity	0-95% non-condensing
LINE / BATTERY TRAN	SFER
Transfer time from line power to battery mode	Transfer time from line power to battery mode: 20 milliseconds (typical - compatible with many computers, servers and networking equipment - verify transfer time compatibility of loads for UPS applications)
Low voltage transfer to battery power	Low voltage transfer to battery power: In AC "auto" mode, inverter/charger switches to battery mode as line voltage drops to 144V (user adjustable to 163, 182, 201V - see manual)
High voltage transfer to battery power	In AC "auto" mode, inverter/charger switches to battery mode as line voltage increases to 272
CERTIFICATIONS	
Certifications	RoHS Compliant
WARRANTY	
Product warranty	(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)

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/products/model.cfm?txtModelID=3026.

©2008 Tripp Lite. All Rights Reserved.