

PowerVerter APS 700W 12VDC 120V Inverter/Charger with Auto-Transfer Switching, 1 Outlet

MODEL NUMBER: **APS700HF**



Description

Tripp Lite's APS700HF Ultra-Compact 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 700 watts of continuous 120V AC power to 1 AC outlet from any 12V battery or automotive DC source. OverPower inverter output feature provides up to 120% of the continuous output for up to 5 seconds, and DoubleBoost inverter output feature delivers up to 200% of the continuous output for up to 2 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, 6-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 mode, plus efficient PWM sine wave AC output in inverter and UPS backup modes. Supports an unlimited amount of runtime with any number of user-supplied batteries connected.

NOTE: To protect against high current draw that may occur during inverter failure, a fuse link rated at 125a should be positioned no more than 18" from the APS700HF's battery in the positive line.

Features

- APS700HF serves as an automotive or stationary DC-to-AC inverter with automatic line-to-battery transfer and integrated battery charger
- Supports 120V AC output from a 120V AC line power source or 12V DC battery source
- 16.6 millisecond automatic transfer switching between line and battery power supports UPS protection during blackouts and voltage fluctuations for equipment compatible with a one cycle transfer time
- 700 watts continuous AC output in inverter mode, 840 watts continuous AC output in AC mode

Highlights

- 12V DC or 120V AC input; 120V AC output; 1 outlet
- 700 watts continuous, 1050 watts OverPower and 1400 watts DoubleBoost inverter output
- 6 amp rated, 3-stage, built-in battery charger
- Auto Transfer Switching option for battery backup / UPS operation - with ISOBAR AC surge suppression
- Ultra-compact, lightweight aluminum housing weighs only 4 lbs. / 1.8 kg

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 16.6 millisecond transfer time. NOTE: For sump pump applications, Tripp Lite recommends its "UT" Utility Truck Inverter/Chargers.

Package Includes

- APS700HF Ultra-Compact Inverter/Charger
- Instruction manual with warranty information



- Double Boost inverter output supports momentary startup loads up to 200% of the continuous rating for durations up to 10 seconds
- OverPower inverter output supports longer duration overloads to 150% for up to 15 seconds in duration 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, 6 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
- NEMA 5-15R output receptacle passes 120V line power or inverter output through to connected equipment
- Ultra-compact, lightweight aluminum housing with secure mounting flanges weighs only 4 lbs./1.8 kg
- 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
- Adjustable brownout response enables user configuration of automatic transfer to battery mode from 85 to 105V AC
- Resettable 7A output circuit breaker and 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

Specifications

OUTPUT	
Frequency Compatibility	60 Hz
Output Receptacles	(1) 5-15R
Output (Watts)	700
Continuous Output Capacity (Watts)	700
Peak Output Capacity (Watts)	1400
Output Nominal Voltage	120V
Output Voltage Regulation	LINE POWER (AC): Maintains 120V nominal sine wave output from line power source. INVERTER POWER (AC): Maintains PWM sine wave output voltage of 120 V AC (+/-5%).
Output Frequency Regulation	60 Hz (+/- 0.3 Hz)
Overload Protection	Includes 7A output breaker for AC output loads
Pure Sine Wave Output	No
INPUT	
Nominal Input Voltage(s) Supported	120V AC
Recommended Electrical Service	DC INPUT: Requires 12V DC 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). AC INPUT: 15A 120V AC recommended
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 72A at 12V DC. AC INPUT: 8.4 amps at 120VAC with full inverter and charger load (1.4A max charger-only)
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, gel or SLA type batteries
DC System Voltage (VDC)	12
Battery Charge	6A max, steps down to float level to maintain
Expandable Runtime	Yes
USER INTERFACE, ALERTS & CONTROLS	
Front Panel LEDs	6 diagnostic LEDs indicate battery voltage level (high, medium & low) and operation (line, inverter, load)
Switches	3 position DC off, auto (inverter or AC) and charge-only switch enables simple operation
SURGE / NOISE SUPPRESSION	
AC Suppression Joule Rating	300
PHYSICAL	
Shipping Dimensions (hwd / in.)	8.5 x 14.5 x 8.5
Shipping Dimensions (hwd / cm)	21.59 x 36.83 x 21.59
Shipping Weight (lbs.)	5.5
Shipping Weight (kg)	2.5
Unit Weight (lbs.)	4
Unit Weight (kg)	1.8
Cooling Method	Multi-speed fan
Material of Construction	Extruded aluminum
Form Factors Supported	Integrated mounting feet for easy installation
ENVIRONMENTAL	
Relative Humidity	0-95% non-condensing
LINE / BATTERY TRANSFER	
Transfer Time (Line Power to Battery Mode)	16.6 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	In AC "auto" mode, inverter/charger switches to battery mode as line voltage drops to 85V (user adjustable to 85, 95V - see manual)
High Voltage Transfer to Battery Power	In AC "auto" mode, inverter/charger switches to battery mode as line voltage increases to 139V
SPECIAL FEATURES	
Remote Control Capability	No



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WARRANTY	
Product Warranty Period (U.S. & Canada)	1-year limited warranty
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	2-year limited warranty
Product Warranty Period (Puerto Rico)	1-year limited warranty

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