

## Important Note

Position a 125A fuse link less than 18 in. from the battery in the positive line to protect against high-current draw that may occur during inverter failure.

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

MODEL NUMBER: **APS700HF**



Portable single-outlet power source for small power applications, such as power tools and computers, as a vehicle inverter, standalone AC power source or extended-run UPS. Ideal for RVs, fleet vehicles and conversion vans.

## Description

The APS700HF 700W PowerVerter APS 12V DC 120V AC Inverter/Charger is a reliable power source for a variety of small power applications ranging from power tools to computers and sensitive monitoring equipment. With no fumes, fuel or excess noise, it's an excellent alternative to generator power.

The DC-to-AC inverter features an automatic line-to-battery transfer switch and integrated charging system that allow it to work as a vehicle inverter, standalone AC power source or extended-run UPS. It delivers 700W of continuous power, 1050W up to 1.5 seconds, or 1400W of peak power up to 1.1 seconds during equipment startup or cycling. An automatic overload detector, cooling fan and resettable AC circuit breaker protect the unit from damage.

Designed for easy installation in RVs, over-the-road trucks, fleet vehicles and conversion vans, the APS700HF converts stored power from any 12V battery or automotive DC source to safe, stable, computer-grade AC power and sends it to a NEMA 5-15R outlet for unlimited runtime. When powered by an external 120V AC source, the unit keeps the user-supplied battery charged via a three-stage 6A charging system while simultaneously delivering AC power to connected equipment.

When used as a UPS, the APS700HF responds to blackouts and brownouts with an automatic, instantaneous transfer to battery-derived AC output. LEDs on the unit indicate AC/DC operational modes, overload status, DC voltage level, shutdown status and system fault status.

## Features

### Reliable Power for Mobile and Remote Sites

- Generates safe, stable, computer-grade 120V AC power from 12V battery bank
- Ideal for powering small applications ranging from power tools to computers and sensitive monitoring equipment
- Designed for easy installation in RVs, over-the-road trucks, fleet vehicles and conversion vans

## Highlights

- Delivers clean 120V AC power from AC or DC power source
- 700W continuous output power; 1400W peak power
- Auto-transfer switching option for UPS operation
- Protects against blackouts, surges and EMI/RFI line noise
- Compact, lightweight aluminum housing weighs just 4 lb.

## Package Includes

- APS700HF 700W PowerVerter APS 12V DC 120V AC Inverter/Charger
- Owner's manual

- Functions as vehicle inverter, standalone AC power source or extended-run UPS
- Features NEMA 5-15R outlet
- Unlimited runtime with variety of user-supplied batteries

#### Meets Normal and Peak Power Demands

- 700W of continuous power
- 1050W of reserve power up to 1.5 sec.
- 1400W of peak power up to 1.1 sec. to accommodate surge power demands during equipment startup and cycling
- Automatic overload detector, built-in multi-speed cooling fan and resettable AC circuit breakers protect unit from damage
- High-current DC input terminals for simple hardwired installation

#### Automatic Transfer Switching

- Transfer relay switches to inverter power during blackout in 16.6 ms
- 3-position switch enables Auto, Charge Only or System Off mode

#### 3-Stage 6A Battery Charger

- Serves as battery charger when external 120V AC power is supplied and powering connected equipment
- Protects battery from overcharging and overdischarging
- Low-battery protection prevents excessive battery depletion

#### Front-Panel LEDs

- Indicate AC/DC operational modes, overload status, DC voltage level, shutdown status and system fault status

#### Compact Aluminum Housing

- Weighs just 4 lb.
- Resists moisture in high-humidity environments
- Built-in mounting feet for installation on any rigid horizontal surface
- Grounding lug connects unit to earth ground or vehicle grounding system
- Built-in AC power cord and NEMA 5-15P plug connects to AC power source

## Specifications

OVERVIEW	
UPC Code	037332126948
INPUT	

Nominal Input Voltage(s) Supported	120V AC
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)
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
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
<b>OUTPUT</b>	
Frequency Compatibility	60 Hz
Pure Sine Wave Output	No
Nominal Output Voltage(s) Supported	120V
Output Receptacles	(1) 5-15R
Continuous Output Capacity (Watts)	700
Peak Output Capacity (Watts)	1400
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
<b>BATTERY</b>	
Expandable Runtime	Yes
Expandable Battery Runtime	Runtime is expandable with any number of user supplied wet, gel or SLA type batteries
Expandable Runtime Description	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
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
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
<b>SURGE / NOISE SUPPRESSION</b>	
AC Suppression Joule Rating	300
<b>PHYSICAL</b>	
Material of Construction	Aluminum
Cooling Method	Multi-speed fan

Form Factors Supported	Integrated mounting feet for easy installation
Shipping Dimensions (hwd / in.)	8.50 x 14.50 x 8.50
Shipping Dimensions (hwd / cm)	21.59 x 36.83 x 21.59
Shipping Weight (lbs.)	5.50
Shipping Weight (kg)	2.49
Unit Dimensions (hwd / in.)	0.000 x 0.000 x 0.000
Unit Weight (lbs.)	4
Unit Weight (kg)	1.81
<b>ENVIRONMENTAL</b>	
Relative Humidity	0%-95% Non-Condensing
<b>LINE / BATTERY TRANSFER</b>	
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
<b>STANDARDS &amp; COMPLIANCE</b>	
Product Compliance	RoHS
<b>WARRANTY &amp; SUPPORT</b>	
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