

# 1250W PowerVerter APS 12VDC 120V Inverter/Charger with Auto Transfer Switching, 2 Outlets

# AL-84011



**Please Note:** Position a 200A 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.

### **Highlights**

- Delivers clean 120V AC power from AC or DC power source
- 1250W continuous output power;
  2500W peak power
- Auto-transfer switching option for UPS operation
- Protects against blackouts, surges and EMI/RFI line noise
- Rugged polycarbonate housing resists moisture and impact

# Package Includes

- 1250W PowerVerter APS 12V
  DC 120V AC Inverter/Charger
- Owner's manual

# Description

The AL-84011 1250W PowerVerter APS 12V DC 120V AC Inverter/Charger is a reliable power source for a wide variety of equipment ranging from power tools and pumps to portable lighting and computer equipment in heavy-load conditions. 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 1250W of continuous power, 1875W up to one hour, or 2500W of peak power up to 10 seconds during equipment startup or cycling. An automatic overload detector, cooling fan and resettable AC circuit breakers protect the unit from damage.

Designed for easy installation in RVs, over-the-road trucks, fleet vehicles and emergency vehicles, the AL-84011 converts stored power from any 12V battery or automotive DC source to safe, stable, computer-grade AC power and sends it to two NEMA 5-15R outlets for unlimited runtime. When powered by an external 120V AC source, the unit keeps the user-supplied battery charged via a three-stage 30A charging system while simultaneously delivering AC power to connected equipment.

When used as a UPS, the AL-84011 responds to blackouts and brownouts with an automatic, instantaneous transfer to battery-derived AC output. LEDs on the unit indicate load level, battery charge level, shutdown status and system fault status.

## **Features**

#### Reliable Power for Mobile, Emergency and Remote Sites

- Generates safe, stable, computer-grade 120V AC power from 12V battery bank
- Ideal for powering tools, saws, motors, pumps, portable lighting, appliances and computer equipment in heavy-load conditions
- · Designed for easy installation in RVs, over-the-road trucks, fleet vehicles and emergency vehicles
- Functions as a vehicle inverter, standalone AC power source or extended-run UPS

- Features 2 front NEMA 5-15R outlets
- Unlimited runtime with variety of user-supplied batteries

#### Meets Normal and Peak Power Demands

- 1250W of continuous power
- 1850W of reserve power up to 1 hr.
- . 2500W of peak power up to 10 sec. to accommodate surge power demands during equipment startup and cycling
- · Automatic overload detector, built-in cooling fan and resettable AC circuit breaker protect unit from damage

# **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
- DIP switches configure high and low voltage auto-transfer

# 3-Stage 30A 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
- DIP switches configure wet/gel charging profiles

# **Optional Remote Control Capability**

RJ45 communication port allows connection of optional remote control module, such as AL-84019

#### **Front-Panel LEDs**

• Indicate load level, battery charge level, shutdown status and system fault status

#### Rugged Polycarbonate Housing

- Resists moisture, vibration and impact
- Built-in mounting feet for installation on any rigid horizontal surface
- Grounding lug connects unit to earth ground or vehicle grounding system
- Built-in 6 ft. AC power cord with NEMA 5-15P plug connects to AC power source

# **Specifications**

ОШТРИТ		
Nominal Output Voltage(s) Supported	120V	
Frequency Compatibility	60 Hz	
Output Receptacles	(2) 5-15R	
Output (Watts)	1250	
Continuous Output Capacity (Watts)	1250	
Peak Output Capacity (Watts)	2500	

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 8A input breaker dedicated to the charging system and 12A output breaker for AC output loads
INPUT	
Nominal Input Voltage(s) Supported	120V AC
Recommended Electrical Service	DC INPUT: Requires 12VDC input source capable of delivering 125A for the required duration (when used at full continuous capacity - DC requirements increase during OverPower and DoubleBoost operation). For automotive applications, professional hardwire installation with 225A minimum battery system fusing is recommended. AC INPUT: 120VAC
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 127A at 12V DC. AC INPUT: 12 amps at 120VAC with full inverter and charger load (6.3A 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 batteries
DC System Voltage (VDC)	12
Battery Pack Accessory (Optional)	AL-84018 sealed lead acid battery(optional)
Battery Charge	30A max, 3 step, float for long term maintenance
Expandable Runtime	Yes
USER INTERFACE, ALERTS & COM	ITROLS
Front Panel LEDs	Set of 6 LEDs offer continuous status information on load percentage (6 levels reported) and battery charge level (1 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 AL-84019 accessory when used in inverter mode. In AC uninterruptible power mode, auto/remote setting enables automatic transfer from line power to battery power - to maintain continuous AC power to connected loads.
SURGE / NOISE SUPPRESSION	
AC Suppression Joule Rating	450
PHYSICAL	
Shipping Dimensions (hwd / in.)	12.5 x 11 x 10.75
Shipping Dimensions (hwd / cm)	31.75 x 27.94 x 27.31
Shipping Weight (lbs.)	24.8
Shipping Weight (kg)	11.3
Unit Dimensions (hwd / in.)	7 x 8.75 x 9

Unit Dimensions (hwd / cm)	17.78 x 22.23 x 22.86
Unit Weight (lbs.)	23.2
Unit Weight (kg)	10.5
Cooling Method	Multi-speed fan
Material of Construction	Polycarbonate
Receptacle Color	BLACK
Form Factors Supported	Mounting slots enable permanent placement of inverter on any horizontal surface (see manual for additional mounting information)
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 75V (user adjustable to 85, 95, 105V - see manual)
High Voltage Transfer to Battery Power	In AC "auto" mode, inverter/charger switches to battery mode as line voltage increases to 135V (user adjustable to 145 - see manual)
SPECIAL FEATURES	
Remote Control Capability	Yes
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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