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Position a 100A fuse link less than 18 in. from the battery in the positive line to protect against highcurrent draw that may occur during inverter failure.

# 2400W PowerVerter APS 48VDC 120V Inverter/Charger with Auto-Transfer Switching, Hardwired, UL

MODEL NUMBER: APS2448UL



Portable UL-rated power source for any type of equipment from power tools to computers as a vehicle inverter, standalone AC power source or extended-run UPS. Ideal for RVs, construction equipment and emergency vehicles.

# Description

The APS2448UL 2400W PowerVerter APS 48VDC 120V 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. And it's tested to meet UL (U.S.) and CSA (Canada) safety standards.

The DC-to-AC inverter features an automatic line-to-battery transfer switch and integrated charging system that allow it to work as an extended-run UPS, standalone AC power source or vehicle inverter. It delivers 2400W of continuous power, 3600W up to one hour, or 4800W 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, commercial and fleet vehicles, emergency vehicles and construction equipment, the APS2448UL converts stored power from any 48V battery or automotive DC source to safe, stable, computer-grade AC power for unlimited runtime.

When hardwired to an external 120V AC source, the unit keeps the user-supplied battery charged via a three-stage 15A charging system while simultaneously delivering AC power to connected equipment. When used as a UPS, the APS2448UL responds to blackouts and brownouts with an automatic, instantaneous transfer to battery-derived AC output.

# **Highlights**

- Delivers clean 120V AC power from AC or DC power source
- 2400W continuous output power; 4800W peak power
- Auto-transfer switching option for UPS operation
- Protects against blackouts, surges and EMI/RFI line noise
- Tested to UL (U.S.) and CSA (Canada) safety standards

# Package Includes

- APS2448UL 2400W
   PowerVerter APS 48V DC 120V
   AC Inverter/Charger
- Owner's manual

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# **Features**

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

- Generates safe, stable, computer-grade 120V AC power from 48V 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, commercial and fleet vehicles, emergency vehicles and construction equipment
- Functions as extended-run UPS, standalone AC power source or vehicle inverter
- Unlimited runtime with variety of user-supplied batteries
- Tested to UL (U.S.) and CSA (Canada) safety standards

#### **Meets Normal and Peak Power Demands**

- 2400W of continuous power
- 3600W of reserve power up to 1 hr.
- 4800W 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 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 8 ms
- 3-position switch enables Auto, Charge Only or System Off mode
- DIP switches configure high and low voltage auto-transfer

#### 3-Stage 15A 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 Tripp Lite's APSRM4

#### Front-Panel LEDs

 Indicate AC/DC operational modes, overload status, DC voltage 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

# **Specifications**

OVERVIEW		
-	007000040040	
UPC Code	037332042842	
INPUT		
Nominal Input Voltage(s) Supported	120V AC	
Recommended Electrical Service	DC INPUT: Requires 48VDC input source capable of delivering 56A for the required duration (when used at full continuous capacity - DC requirements increase during Over-Power and Double-Boost operation).	
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 56A at 48VDC. AC INPUT: 33 amps at 120VAC with full inverter and charger load (13A max charger-only / combined input load to support charger and AC output is automatically controllable to 66%-33%-0% based on AC output load	
Input Connection Type	DC INPUT: Set of 2 DC bolt-down terminals. AC INPUT: Hardwire via built in junction box with cover plate	
Voltage Compatibility (VAC)	120	
Voltage Compatibility (VDC)	48	
ОИТРИТ		
Frequency Compatibility	60 Hz	
Pure Sine Wave Output	No	
Output (Watts)	2400	
Nominal Output Voltage(s) Supported	120V	
Output Receptacles	Hardwire	
Continuous Output Capacity (Watts)	2400	
Peak Output Capacity (Watts)	4800	
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 15A input breaker dedicated to the charging system and 20A output breaker for AC output loads.	
BATTERY		
Expandable Battery Runtime	Runtime is expandable with any number of user supplied wet or gel type batteries	
Expandable Runtime	Yes	
DC System Voltage (VDC)	48	
Battery Pack Accessory (Optional)	<a class="productLink" href="//www.tripplite.com/12VDC-Sealed-Maintenance-Free-Battery-All-Inverter-Chargers-12VDC-Battery-Connections~98-121">98-121</a> >  sealed lead acid battery (optional)	



Battery Charge	15A
USER INTERFACE, ALERTS & CO	NTROLS
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 <a class="productLink" href="//www.tripplite.com/Remote-Control-Module-Tripp-Lite-PowerVerter-Inverters-Inverter-Chargers~APSRM4">APSRM4</a> 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.
PHYSICAL	
Cooling Method	Multi-speed fan
Form Factors Supported	Mounting slots enable permanent placement of inverter on any horizontal surface (see manual for additional mounting information)
Material of Construction	Polycarbonate
Shipping Dimensions (hwd / cm)	32.77 x 53.59 x 36.83
Shipping Dimensions (hwd / in.)	12.90 x 21.10 x 14.50
Shipping Weight (kg)	20.23
Shipping Weight (lbs.)	44.60
Unit Dimensions (hwd / cm)	18.415 x 21.59 x 42.545
Unit Dimensions (hwd / in.)	7.25 x 8.5 x 16.75
Unit Weight (kg)	17.51
Unit Weight (lbs.)	38.6
ENVIRONMENTAL	
Relative Humidity	0-95% non-condensing
Operating Temperature	32-104 Fahrenheit / 0-40 Celcius
LINE / BATTERY TRANSFER	
Transfer Time (Line Power to Battery Mode)	8 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	
Load Sensing	Optional load sense function enables automatic inverter shutoff and startup as connected equipment is powered off and on. Front panel load sense potentiometer can be set to shutoff or turn on inverter power in response to loads of any level, up to 150 watts.
STANDARDS & COMPLIANCE	



Certifications	Tested to UL1778 (US), CSA CAN/CSA-C22.2 No.107.1-M91, NOM, RoHS	
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	
Optional Coverage	1-Year, 2-Year, and 3-Year standard warranty extensions available. See Extended Warranties section for ordering part number	

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