

2400W PowerVerter APS 24VDC 230V Inverter/Charger with Auto-Transfer Switching, Hardwired

MODEL NUMBER: **APSINT2424**



Highlights

- Delivers clean 230V 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
- Rugged polycarbonate housing resists moisture and impact

Package Includes

- APSINT2424 2400W PowerVerter APS 24V DC 230V AC Inverter/Charger
- Owner's manual

Description

The APSINT2424 2400W PowerVerter APS 24V DC 230V 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 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 APSINT2424 converts stored power from any 24V battery or automotive DC source to safe, stable, computer-grade AC power for unlimited runtime. When hardwired to an external 230V 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 APSINT2424 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, Emergency and Remote Sites

- Generates safe, stable, computer-grade 230V AC power from 24V 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 a vehicle inverter, standalone AC power source or extended-run UPS
- Unlimited runtime with variety of user-supplied batteries



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 20 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 230V 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

OUTPUT	
Frequency Compatibility	50 Hz
Output Receptacles	Hardwire
Output (Watts)	2400
Continuous Output Capacity (Watts)	2400
Peak Output Capacity (Watts)	4800
Output Nominal Voltage	230V
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)
Overload Protection	Includes 10A input breaker dedicated to the charging system and 15A output breaker for AC output loads.



Pure Sine Wave Output	No
INPUT	
Nominal Input Voltage(s) Supported	230V AC
Recommended Electrical Service	DC INPUT: Requires 24VDC input source capable of delivering 112A 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 300A minimum battery system fusing is recommended.
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 112A at 24VDC. AC INPUT: 17 amps at 230VAC with full inverter and charger load (7A max charger-only / combined input load to support charger and AC output is automatically controllable to 66%-33%-0% based on AC output loading using the charger limiting set points - see manual for setting instructions)
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)	230
Voltage Compatibility (VDC)	24
BATTERY	
Expandable Battery Runtime	Runtime is expandable with any number of user supplied wet or gel type batteries
DC System Voltage (VDC)	24
Battery Pack Accessory (Optional)	98-121 sealed lead acid battery(optional)
Battery Charge	30 amp
Expandable Runtime	Yes
USER INTERFACE, ALERTS & CONTROLS	
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 uninterruptible power mode, "auto/remote" setting enables automatic transfer from line power to battery power - to maintain continuous AC power to connected loads.
PHYSICAL	
Shipping Dimensions (hwd / in.)	13.5 x 15 x 21.5
Shipping Dimensions (hwd / cm)	34.29 x 38.1 x 54.61
Shipping Weight (lbs.)	42
Shipping Weight (kg)	19.5
Unit Dimensions (hwd / in.)	7.25 x 8.5 x 16.25
Unit Dimensions (hwd / cm)	18.42 x 21.59 x 41.28
Unit Weight (lbs.)	38.2
Unit Weight (kg)	17.3
Cooling Method	Multi-speed fan
Material of Construction	Polycarbonate



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)	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	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 259V (user adjustable to 264 - 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.
Remote Control Capability	Yes
CERTIFICATIONS	
Certifications	RoHS Compliant
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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