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Model Number: APS3636VR

PowerVerter® APS 3600W Inverter/Charger with Auto-Transfer Switching and Line-Interactive Voltage Regulation



Highlights

- 36V DC or 120V AC input; 120V AC output (hardwired)
- 3600 watts continuous, 5400 watts OverPower and 7200 watts DoubleBoost inverter output
- 3 stage, 30 amp selectable wet/dry cell battery charger
- Auto Transfer Switching option for battery backup / UPS operation - includes wired APSRM4 remote control switch
- Automatic Voltage Regulation corrects brownouts and overvoltages without using battery power
- High reliability large-transformer design with protected DC and AC wiring terminals

Description

Tripp Lite's APS3636VR 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 a truck/RV/Industrial inverter. Supplies up to 3600 watts of continuous 120V AC power from any 36V battery. OverPower inverter output feature temporarily provides up to 150% of the continuous output for 1-60 minutes and DoubleBoost inverter output feature delivers up to 200% of the continuous output for up to 10 seconds, providing the extra power needed to cold start heavy-duty tools and motorized equipment. When hardwire AC input is energized, commercial power passes through to connected equipment and the battery set is recharged via 3 stage, 30 amp charging system. In UPS mode, the APS system responds to blackouts and severe 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 operation, plus efficient PWM sine wave AC output in inverter and UPS backup modes. Built-in Automatic Voltage Regulation (AVR) corrects line power AC brownouts and overvoltages without using battery power during battery charging and UPS standby modes. Reliable large transformer design, with frequency control powers resistive electronic loads or large inductive motors, compressors and other items with high current needs on startup. Included APSRM4 wired remote power switch with full status LEDs provides remote power inverter on/off switching and continuous status information. Supports an unlimited amount of runtime with any number of user-supplied batteries connected. Highly adaptable to a variety of applications and site conditions with adjustable charger settings for wet/gel battery types and selectable line to battery power transfer voltages.

NOTE: To protect against high current draw that may occur during inverter failure, a fuse link rated at 300a should be positioned no more than 18" from the APS3636VR's battery in the positive line.

Applications

- Versatile inverter/charger system with auto-transfer switching serves as a truck/RV/Industrial 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

- APS3636VR Inverter/Charger
- Instruction manual with warranty information
- Wired Remote Switch with full LED status indicators (model APSRM4)

Features

- APS3636VR serves as a truck/RV/Industrial 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 36V DC battery source
- 3600 watts continuous AC output in inverter mode, 3600 watts continuous AC output in AC mode

- Double Boost inverter output supports momentary startup loads up to 200% of the continuous rating for up to 10 seconds
- 3 stage, 30 amp battery charger with adjustable settings for wet/gel battery types offers fast, reliable battery recharging
- 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
- Set of 4 configuration dipswitches support wet/gel battery charging profiles, adjustable 135/145V high voltage auto transfer during overvoltages and selectable 75/85/95/105V AC low voltage auto transfer during brownouts
- Resettable 25A charger AC input breaker and resettable 30A AC output breaker and automatic 2 speed 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
- Load sensing control dial enables adjustable load threshold required to automatically turn the inverter on and off in DC mode as load conditions change

Specifications

OVERVIEW	
Intended Application	Industrial Back up Power, Alternative Emergency Power,(Sump Pumps, Lighting, Computers & Radio's)
OUTPUT	
Frequency compatibility	60 Hz
Output watts	3600
Continuous output capacity (watts)	3600
Peak output capacity (watts)	7200
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 25A input breaker dedicated to the charging system and 30A output breaker for AC output loads.
Outlet quantity / type	Hardwire
INPUT	
Nominal Input Voltage(s) Supported	120V AC
Recommended Electrical Service	DC INPUT: Requires 36VDC input source capable of delivering 114A 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 - 114A at 36VDC. AC INPUT: 54 amps at 120VAC with full inverter and charger load (20A 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 DC bolt-down terminals. AC INPUT: Hardwire via built in junction box with cover plate

Voltage compatibility (VAC)	120
Voltage compatibility (VDC)	36
BATTERY	
Expandable battery runtime	Runtime is expandable with any number of user supplied wet or gel type batteries
DC system voltage (VDC)	36
Battery Pack Accessory (optional)	98-121 sealed lead acid battery (optional)
Battery charge	30A
VOLTAGE REGULATION	
Voltage regulation description	Includes automatic voltage regulation to correct brownouts and over-voltages back to usable levels
Overvoltage correction	Over-voltages starting at 127 are automatically reduced by 10%
Brownout correction	Brownouts starting at 103 are automatically boosted by 10%
LEDS ALARMS & SWITCHES	
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 External switch for wired remote control of APS unit (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.
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.
PHYSICAL	
Shipping Dimensions (HWD/in)	13.25 x 15 x 21.13
Shipping Dimensions (HWD/cm)	33.66 x 38.1 x 53.67
Shipping weight (lbs)	61
Shipping weight (kg)	27.7
Unit Dimensions (HWD/in)	7.25 x 8.5 x 16.25
Unit Dimensions (HWD/cm)	18.41 x 21.59 x 41.28
Unit weight (lbs)	55.8
Unit weight (kg)	25.3
Cooling method	Multi-speed fan
Material of construction	Polycarbonate

Style	Heavy-duty with built-in battery charger
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 from 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, 95V - 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.
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

Related Items

Optional Products

Related Model	Description	Qty.
APSRM4	Remote Control Module - for Tripp Lite Inverters and Inverter/Chargers	1
BP-260	Ideal battery housing for use with Tripp Lite PowerVerter APS inverter/charger systems with a 12 or 24V DC system voltage.	1
98-121	12V DC Sealed, Maintenance-Free Battery	1

More information, including related products, owner's manuals, and additional technical specifications, can be found online at <http://www.tripplite.com/sku/APS3636VR>.

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