

## PowerVerter APS INT 3600W 36VDC 230V Inverter/Charger with Auto Transfer Switching, Hardwired, AVR

MODEL NUMBER: APSINT3636VR



#### Description

Tripp Lite's APSINT3636VR 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 an automotive inverter. Supplies up to 3600 watts of continuous 230V AC power from any 36V battery or automotive DC source. When hardwire AC input is energized, commercial power passes through to connected equipment and the battery set is recharged via 3-stage, selectable wet/dry cell battery charger (30-amp high/7.5-amp low). 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 (APSRM4 included). 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.

#### **Features**

- Supports 230V AC output from a 230V AC line power source or 12V DC battery source
- 20 millisecond automatic transfer between line and battery power supports UPS protection during blackouts and voltage fluctuations for equipment compatible with a one cycle transfer time
- Double Boost inverter output supports momentary startup loads up to 200% of the continuous rating for up to 10 seconds (see specification chart)

#### **Highlights**

- 36V DC or 230V AC input; 230V,
   50 Hz output (hardwired)
- 3600 watts continuous, 5400 watts OverPower and 7200 watts DoubleBoost inverter output (see specifications)
- 3-stage, selectable wet/dry cell battery charger (30-amp high/7.5-amp low)
- 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

#### **Applications**

 Versatile inverter/charger system with auto-transfer switching serves as an automotive 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 20 millisecond transfer time. NOTE: For sump pump applications, Tripp Lite recommends its "UT" Utility Truck Inverter/Chargers.

#### Package Includes

- APSINT3636VR Inverter/Charger
- Instruction manual with warranty information
- Wired Remote Switch with full LED status indicators (model APSRM4)

# Tripp Lite 1111 W. 35th Street Chicago, IL 60609 USA Telephone: 773.869.1234 www.tripplite.com



- OverPower inverter output supports longer duration overloads to 150% for 1-60 minutes under ideal battery and temperature conditions.
- 3-stage, selectable wet/dry cell battery charger (30-amp high/7.5-amp low)
- 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 259/264V high voltage auto transfer during overvoltages and selectable 144/163/182/201V AC low voltage auto transfer during brownouts
- Set of 4 additional configuration dip switches support 4 levels of charger limiting relative to output load size
- Resettable 10A charger AC input breaker and resettable 15A AC output breaker and automatic 2 speed cooling fan protect the inverter from load and temperature related failures
- · Automatic overload and thermal shutoff safely turns off inverter as excessive loads or overheating conditions develop
- Front panel remote control connector enables remote off/on switching (requires APSRM4 switch accessory)

### **Specifications**

General Info		
RoHS	Υ	
OVERVIEW		
Style	Heavy-duty with built-in battery charger	
ОИТРИТ		
Frequency Compatibility	50 Hz	
Output Receptacles	Hardwire	
Output (Watts)	3600	
Continuous Output Capacity (Watts)	3600	
Peak Output Capacity (Watts)	7200	
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 12A input breaker dedicated to the charging system and 20A output breaker for AC output loads.	
INPUT		
Nominal Input Voltage(s) Supported	230V 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 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 - 114A at 36VDC. AC INPUT: 26 amps at 230VAC with full inverter and charger load (10.4A 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 DC bolt-down terminals. AC INPUT: Hardwire via built in junction box with cover plate
Voltage Compatibility (VAC)	230
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	30-amp high/7.5-amp low
VOLTAGE REGULATION	
Voltage Regulation Description	Includes automatic voltage regulation to correct brownouts and over-voltages back to usable levels
Overvoltage Correction	Over-voltages are automatically reduced by 10%
Brownout Correction	Brownouts are automatically boosted by 10%
USER INTERFACE, ALERTS & CON	ITROLS
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.)	13.25 x 15 x 21.13
Shipping Dimensions (hwd / cm)	33.66 x 38.1 x 53.67
Shipping Weight (lbs.)	63
Shipping Weight (kg)	28.6
Unit Dimensions (hwd / in.)	7 x 8.5 x 14
Unit Dimensions (hwd / cm)	17.78 x 21.59 x 35.56
Unit Weight (lbs.)	58
Unit Weight (kg)	26.3
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, 182V - 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	
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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