750W PowerVerter RV Inverter/Charger with Hardwire Input/Output

MODEL NUMBER: **RV750ULHW**



Highlights

- 12V DC or 120V AC input; 120V AC output (hardwired)
- 750 watts continuous, 1125 watts OverPower™ and 1500 watts DoubleBoost™ inverter output
- 3 stage, 11/45 amp selectable wet/dry cell battery charger
- Built-in Isobar® premium AC surge protection and Auto Transfer Switching option for battery backup / UPS operation
- Tested to power inverter standards UL458 (USA) and CSA (Canada)
- High reliability large-transformer design with protected DC and AC wiring terminals

Package Includes

- RV750ULHW Inverter/Charger
- Instruction manual with warranty information

Description

The RV750ULHW Inverter/Charger is a quiet alternative to gas generators with no fumes, fuel or noise to deal with. It provides equipment with utility- or generator-supplied AC electricity filtered through premium ISOBAR® surge protection. This 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 suitable for rugged RV applications. Supplies up to 750 watts of continuous 120V AC power from any 12V DC battery or automotive DC source. OverPower inverter output feature temporarily provides up to 150% of the continuous output for one to 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 three-stage selectable 11/45A charging system. In UPS mode, the APS system responds to blackouts and 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. 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. Optional APSRM4 wired remote power switch with full status LEDs provides remote power inverter on/off switching and continuous status information (APSRM4 sold separately). 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 125A should be positioned no more than 18 inches from the RV750ULHW's battery in the positive line.

Features

- RV750ULHW serves as an automotive 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 12V DC battery source
- 16.6 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
- 750 watts continuous AC output in inverter mode, 750 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
- OverPower™ inverter output supports longer duration overloads to 150% for 1-60 minutes under ideal battery and temperature conditions. (For best results, utilize OverPower usage for as short of a duration

as possible, ensure battery bank and cabling is able to provide full nominal DC voltage under load and allow inverter/charger to fully cool before and after OverPower usage.)

- 3 stage, selectable 11/45 amp battery charger with adjustable settings for wet/gel battery types offers fast, reliable battery recharging
- Protected hardwire bolt-down input lugs safely accept heavy gauge input wiring from attached battery bank
- Protected hardwire output passes 120V line power or inverter output through to connected equipment
- Reliability enhanced large-transformer design tested to UL (USA) and CSA (Canada) standards
- 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
- Set of 4 additional configuration dipswitches support 4 levels of charger limiting relative to output load size, a battery equalization program and battery charger low/high/off settings
- Resettable 10A charger AC input 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
- Front panel remote control connector enables remote off/on switching (requires APSRM4 switch accessory). Optional APSRM4 accessory also includes user configurable jacks to support inverter shutoff or startup as a vehicle ignition is engaged
- 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	
UPC Code	037332121639
INPUT	
Nominal Input Voltage(s) Supported	120V AC
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 72A at 12V DC. AC INPUT: 29 amps at 120V AC with full inverter and charger load (9.3A max charger-only / combined input load to support charger and AC output is automatically controllable to 66%-33%-0% based on AC output.
Recommended Electrical Service	DC INPUT: Requires 12V DC input source capable of delivering 73A for the required duration (when used at full continuous capacity - DC requirements increase during Over-Power and Double-Boost operation).
Input Connection Type	DC INPUT: Set of 2 DC bolt-down terminals. AC INPUT: hardwire
Input Cord Length Details	DC INPUT: User supplies cabling. 6 gauge or larger (see manual). AC INPUT: hardwire
Voltage Compatibility (VAC)	120
Voltage Compatibility (VDC)	12
OUTPUT	

Frequency Compatibility	60 Hz
Pure Sine Wave Output	No
Nominal Output Voltage(s) Supported	120V
Output Receptacles	Hardwire
Continuous Output Capacity (Watts)	750
Peak Output Capacity (Watts)	1500
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 10A input breaker dedicated to the charging system
BATTERY	
Expandable Runtime	Yes
Expandable Battery Runtime	Runtime is expandable with any number of user supplied wet, gel or SLA batteries
Expandable Runtime Description	Runtime is expandable with any number of user supplied wet, gel or SLA batteries
DC System Voltage (VDC)	12
Battery Pack Accessory (Optional)	98-121 sealed lead acid battery (optional)
Battery Charge	11A / 45A (selectable)
LVC (Low Voltage Cut-Off)	10VDC +/-3%
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 APSRM4 accessory (sold separately) in inverter mode. In AC uninterruptibl
SURGE / NOISE SUPPRESSION	
AC Suppression Joule Rating	450
PHYSICAL	
Material of Construction	Polycarbonate
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)
Shipping Dimensions (hwd / in.)	12.40 x 10.50 x 10.70
Shipping Dimensions (hwd / cm)	31.50 x 26.67 x 27.18
Shipping Weight (lbs.)	18.60
Shipping Weight (kg)	8.44

Unit Dimensions (hwd / in.)	7.000 x 8.750 x 9.000
Unit Dimensions (hwd / cm)	17.78 x 22.23 x 22.86
Unit Weight (lbs.)	16
Unit Weight (kg)	7.26
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 - 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 145V
FEATURES & SPECIFICATIONS	
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	
Product Certifications	CSA (Canada); UL 458
Product Compliance	RoHS
WARRANTY & SUPPORT	
Product Warranty Period (U.S. & Canada)	30-month limited warranty
Product Warranty Period (International)	1-year limited warranty
Product Warranty Period (Mexico)	30-month limited warranty
Product Warranty Period (Puerto Rico)	30-month limited warranty

1000 Eaton Boulevard
Cleveland, OH 44122
United States
https://tripplite.eaton.com

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