

## PowerVerter 2000W 120V 12VDC RV Inverter/Charger with Auto-Transfer Switching, Hardwired, UL458

MODEL NUMBER: **MRV2012UL**



The MRV2012UL is a heavy-duty, DC-to-AC inverter with automatic line-to-battery transfer and integrated charging system that serves as an extended-run UPS, a standalone power source or an automotive inverter suitable for recreational applications.

### Features

#### Inverter

- MRV2012UL serves as an automotive or stationary DC-to-AC inverter with automatic line-to-battery transfer and integrated battery charger
- Supplies a 120V AC output from a 120V AC line power source or 12V DC battery source
- 2000 watts continuous AC output in inverter mode, 3600 watts continuous AC output in AC line power mode

#### Automatic Transfer

- 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

#### Battery Charger

- 3-stage battery charger with user-selectable 25/100 amp operation and adjustable settings for wet/gel battery types with charger on/off capability; offers fast, reliable battery recharging
- Protected hardwire DC terminal posts safely accept heavy-gauge input wiring from attached battery bank
- Protected hardwire output passes 120V line power or inverter output through to connected equipment
- Extremely reliable large-transformer design tested to UL (USA & Canada) standards

### Highlights

- Heavy-duty DC-to-AC, PWM sine wave inverter with automatic line-to-battery transfer and integrated charging system
- Functions as an extended-run UPS, a standalone power source or an automotive inverter
- 2000 watts continuous, 3000 watts OverPower™ and 4000 watts DoubleBoost™ inverter output
- 12V DC or 120V AC input; 120V, 60 Hz output (hardwired)
- 3-stage battery charger with user-selectable 25/100 amp, wet/dry cell operation
- Built-in Isobar® premium AC surge protection
- Unlimited back up time with user supplied batteries

### Package Includes

- MRV2012UL Inverter/Charger
- Instruction manual with warranty information
- Battery Temperature Sensor cable
- Conduit hanger

### **Overload / Overtemperature Protection**

- DoubleBoost 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 up to 60 minutes under ideal battery and temperature conditions. (For best results, utilize OverPower usage 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.)
- Resettable 25A charger AC input breaker and variable-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

### **Operating Modes / Display LEDs**

- 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
- Six front panel LEDs display AC/DC operational modes, overload status, DC voltage level, shutdown status and system fault status
- 4 configuration dip-switches support wet/gel battery charging profiles, charger enable/disable capability, selectable 75/85/95/105V AC low voltage auto transfer points during brownout conditions
- 4 additional configuration dip-switches support 4 levels of charger limiting relative to output load size, a battery equalization program and battery charger low/high settings

### **Optional Features**

- Front panel connector enables remote off/on switching (requires optional APSRM4 remote control module, sold separately)
- Load-sensing control dial enables adjustable load threshold required to automatically turn the inverter on and off in DC mode as load conditions change
- Battery temperature sensor with 20-ft. (6.09 m) cable to prolong battery life by adjusting the charge level based on battery temperature
- Ignition Switch Control Jack can be used to connect the Inverter to your vehicle's ignition switch in order to automatically control the Inverter.
- Automatic Generator Starter jack enables user configuration of automatic generator startup as inverter batteries drop to 11.5V DC and generator shutoff as inverter batteries are recharged to 14.1V DC

### **Construction**

- Moisture-resistant construction enables vehicular operation in high-humidity environments





LVC (Low Voltage Cut-Off)	10V DC +/-3%
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
Front Panel LEDs	6 LEDs offer continuous status information on load (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 <a href="http://www.tripplite.com/Remote-Control-Module-Tripp-Lite-PowerVerter-Inverters-Inverter-Chargers-APSRM4">APSRM4</a> ; accessory (sold separately) in inverter mode. In AC uninterruptibl
<b>PHYSICAL</b>	
Cooling Method	Multi-speed fan
Included Accessories	Battery temperature sensor cable; conduit hanger
Form Factors Supported	Mounting slots enable secure placement of inverter on any horizontal surface (see manual for additional mounting information)
Material of Construction	Polycarbonate, Aluminum
Shipping Dimensions (hwd / cm)	30.73 x 53.85 x 34.29
Shipping Dimensions (hwd / in.)	12.10 x 21.20 x 13.50
Shipping Weight (kg)	21.00
Shipping Weight (lbs.)	46.30
Unit Dimensions (hwd / cm)	20.32 x 26.67 x 44.45
Unit Dimensions (hwd / in.)	8 x 10.5 x 17.5
Unit Weight (kg)	19.60
Unit Weight (lbs.)	43.2
<b>ENVIRONMENTAL</b>	
Relative Humidity	0-95% non-condensing
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time (Line Power to Battery Mode)	16.6 ms (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
<b>SPECIAL FEATURES</b>	
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.
<b>STANDARDS &amp; COMPLIANCE</b>	
Certifications	Meets UL458 (USA & Canada), RoHS Compliant



**Tripp Lite**  
1111 W. 35th Street  
Chicago, IL 60609 USA  
Telephone: 773.869.1234  
[www.tripplite.com](http://www.tripplite.com)

WARRANTY	
Product Warranty Period (Worldwide)	30-month limited warranty

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