



# Model #: UT2012UL

### 2000-Watt Utility/Work Truck DC-to-AC Inverter/Charger



#### **Highlights**

- 12V DC or 120VAC input; 120VAC output; 2 GFCI protected outlets
- 2000 watts continuous, 3000 watts OverPower and 4000 watts
- DoubleBoost inverter output.
- 3 stage, 60A / 15A selectable wet / gel / AGM cell battery charger
- Built-in Isobar® premium AC surge protection and Auto Transfer
- Switching option for battery backup / UPS operation
- Meets OSHA requirements

#### **Description**

Tripp Lite UT2012UL Utility Work Truck Inverter / Charger are the quiet alternative to gas generators with no fumes, fuel or noise. 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 work site applications. Supplies up to 2000 watts of continuous 120V AC power from any 12 DC battery or automotive DC source. OverPower TM inverter output feature temporarily provides up to 150% of the continuous output for 1-60 minutes, and DoubleBoost TM inverter out put feature delivers up to 200% of continuous output for up to 10 seconds, providing the extra power needed to start heavy-duty tools and motorized equipment. When AC cable is connected to a live wall socket, commercial power passes through to connected equipment and the battery set is recharged via 3 stage selectable 15/60Amp 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. A set of high current DC input terminals is included for simple installation (user supplies batteries and cabling - see owners 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 devices with high current needs on startup. Included is the APSRM4 wired remote power switch with full status LED's, which provides remote power inverter on/off switching and continuous status information. The UT2012UL 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.

### Applications

Versatile inverter / charger system with auto-transfer switching serves as an automotive inverter for utility work trucks, conversion vans and fleet service vehicles; a standalone power source for off grid, alternative energy or export applications, emergency home power applications such as sump pumps, and as an uninterruptible power supply (UPS) for items compatible with a 16.6 millisecond transfer time.

#### Package Includes

- UT2012UL Inverter/Charger
- APSRM4 Remote
- Remote battery temperature sensor cable
- Instruction manual with warranty information

#### **Features**

- UT2012UL 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 120VAC line power source or 12VDC 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.
- 2000 watts continuous AC output in inverter mode, 4000 watts continuous AC output in AC mode.
- Double Boost inverter output supports momentary startup loads of up to 200% of the continuous rating for up to 10 seconds.
- OverPower inverter output supports 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 15/60 Amp battery charger with adjustable settings for wet/gel/AGM battery types offers fast, reliable battery recharging.
- · Protected hardwire bolt-down input lugs safely accept heavy gauge input wiring from attached battery bank.
- Two built in NEMA 5-15R GFCI protected output receptacles pass 120V line power or inverter output through to connected equipment.
- Reliability enhanced large transformer design tested to UL (USA) and (CSA) Canada standards with secure mounting
- Flanges and protected DC wiring terminals.
- Moisture resistant construction enables vehicular 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 (6) six front panel LED's display AC/DC operational modes, overload status, DC voltage level, shutdown status and system fault status
- Set of (4) four configuration dipswitches support wet/gel/AGM battery charging profiles, adjustable 135/145V high voltages and selectable 75/85/95/105V AC low voltage auto transfer during brownouts.
- Set of (4) four additional configuration dipswitches support 4 levels of charger limiting relative to output load size, a battery equalization program and battery charger low/high settings.
- Resettable 25A charger AC input breaker and settable 20A 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.
- Front panel remote control connector enables remote off/on switching, with APSRM4 remote accessory.
- APSRM4 remote 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.
- Includes a battery temperature sensor with 20 foot cable, to prolong battery life, by adjusting the charge level based on battery temperature.

### **Specifications**

OVERVIEW				
Intended Application	Utility/Long Haul Truck, Emergency Home Power			
OUTPUT				
Frequency compatibility	60 Hz			
Output watts	2000			
Continuous output capacity (watts)	2000			
Output nominal voltage	120V			
Output voltage regulation	LINE POWER (AC): Maintains 120V nominal sine wave output from line Source. Inverter Power (AC) Maintains PW sine wave output voltage of 120 VAC (+/- 5%)			
Output frequency regulation	60 Hz (+/- 0.3Hz)			
Overload protection	Includes 25A input breaker dedicated to the charging system and 20A output breaker for AC output loads			
Outlet quantity / type	2 AC outlets			

Outlet details	2 NEMA 5-15R GFCI protected outlets				
INPUT					
Recommended Electrical Service	DC INPUT: Requires 12VDC input source capable of delivering 192A for the required Duration (when used at full continuous capacity- DC requirements increase during Over-Power and Double-Boost operation). AC INPUT: 15A 120VAC recommended.				
Input connection type	DC INPUT: set of two (2) DC bolt-down terminals. AC INPUT: NEMA 5-15R GFCI input plug				
Input cord length details	DC INPUT: User supplies cabling. 6 gauge or larger (see manual) AC INPUT: attached 6ft. AC line cord with plug				
Voltage compatibility (VAC)	120				
Voltage compatibility (VDC)	12				
BATTERY					
Expandable battery runtime	Runtime is expandable with any number of user supplied wet or gel or AGM type batteries				
DC system voltage (VDC)	12				
Battery Pack Accessory (optional)	98-121 sealed lead acid battery (optional)				
Battery recharge rate	15A / 60A (selectable)				
LEDS ALARMS & SWIT	CHES				
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 APSRM remote (included) when used in inverted mode. In AC uninterrupt				
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				
SURGE / NOISE SUPPR	RESSION				
AC suppression joule rating	600				
PHYSICAL					
Shipping weight (lbs)	45				
Shipping weight (kg)	20.4				
Cooling method	Multi-speed fan				
Unit Dimensions (HWD/in)	7.25 x 8.5 x 16.25				
Unit Dimensions (HWD/cm)	18.42 x 21.59 x 41.28				
Shipping Dimensions (HWD/in)	13.5 x 14.75 x 21.5				
Shipping Dimensions (HWD/cm)	34.29 x 37.47 x 54.61				
Unit weight (lbs)	40.6				
Unit weight (kg)	18.4				
Material of construction	Polycarbonate				

Receptacle Color	White		
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 TRAN	SFER		
Transfer time from line power to battery mode	16.6 milliseconds (typical -compatible with many computers, servers and networking equipment -verify transfer til compatibility 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 85,95,105 -see manual)		
High voltage transfer to battery power	In AC "auto" mode, inverter / charger switches to battery mode as line voltages increases 135V (user adjustable to 145 -see manual)		
SPECIAL FEATURES			
Remote control capability	Yes		
CERTIFICATIONS			
Certifications	Tested to UL 458 (USA) and CSA (Canada)		
WARRANTY			
Product Warranty Period (U.S., Canada & Puerto Rico)	30-month limited warranty		

## **Related Items**

### **Optional Products**

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

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/en/products/model.cfm?txtModelID=4206.

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