



# Model UX Series

INVERTER/CHARGER

## For Homes, Offices, Light Industrial, & Remote Power Applications

The new UX Series of inverters is the best choice for systems of 500 to 1400 watts when efficiency, modest power and economical considerations are of prime importance.

**500 - 1400 watts of efficient power** This compact inverter series will produce 500 to 1400 watts of standard household electrical power and can start & run appliances up to three times the continuous rating. The UX series makes the most of the battery power available by operating loads at efficiencies up to 92% and by consuming as little as 1/2 watt under no-load conditions. Load-compensated "smart" protection circuitry delivers all the energy your battery bank can safely provide, but shuts down the inverter if your batteries approach dangerous low discharge levels.

## Options to fit your installation needs

- Remote Control (RC-8/50 or RC-8/100) may be panel-mounted 50 or 100 feet (15 or 30 meters) away for convenient indication of the inverter's operating status and ON/OFF control.
- Stand-By (SB) includes automatic battery charger and AC transfer switch.
- Battery Temperature Sensor (BTS) automatically controls accurate charge to batteries.

**Step up to Trace inverters** Other low cost inverter brands will only sustain a large power requirement for a moment. The Trace UX series can start and run a high power loads of twice their rated power for nearly a full minute. And with a Trace, you get the most sophisticated protection circuitry in the industry, a full two year warranty on parts and labor, and the security of knowing you have the most dependable power inverter in the world.

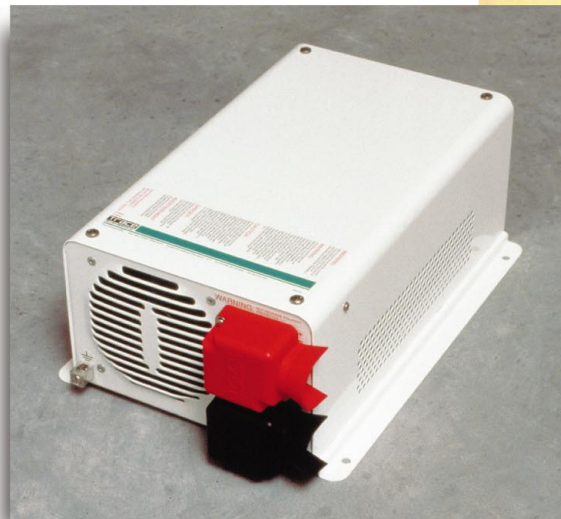
## The Solution: a low cost, reliable, and easy to use inverter/charger

- 500 to 1400 watts continuous output inverters with a high performance battery charger option available.
- High efficiency, high surge capacity, and low idle current.
- Low power "search mode" to conserve energy
- Quiet operation.
- Optional three stage charger with temperature compensation (SB models only)
- Fast switching for standby power systems (SB models only)
- Certified to UL standard 1741 for PV Power Systems and CSA-C22.2, No. 107.1-M91.

**Convenience:** Enjoy using standard home electrical appliances and tools from your batteries. The UX series converts DC battery power into normal household AC to run hand tools, microwaves, televisions, computers - almost any small to medium size equipment. Even run small refrigerators which have high current demands.

**Automatic operation:** Plug into utility power or rev-up your generator, and the UX model inverter starts charging your batteries and automatically transfers power to your electrical system. It charges rapidly and completely without overcharging and maintains a full charge indefinitely. The high-power design charges batteries in three stages: bulk, absorption and float. When your AC input power fails, transfer to inverter power is automatic and typically within 16 milliseconds to keep lights, phone, appliances, and most computers running without missing a beat (this feature only available with the SB battery charging option).

**Protection:** In the inverter mode, the unit automatically turns off to prevent batteries from running seriously low. The UX design ensures long battery life and is compatible with both sealed type or liquid lead acid type batteries. Other protection guards against over temperature & overload. The crystal controlled voltage and frequency circuitry also protects your appliances from damage.



From  
Trace Engineering,  
maker of the world's  
most reliable  
inverters

500-1400 watts  
power output

THE POWER COMPANY  
**Trace**  
ENGINEERING®

# Model UX Series

## SPECIFICATIONS AND FEATURES (rev. 1.0)

MODEL	UX512E	UX612	UX1112	UX1112E	UX1412
<b>Nominal DC Input Voltage</b>	<b>12 VDC</b>	<b>12 VDC</b>	<b>12 VDC</b>	<b>12 VDC</b>	<b>12 VDC</b>
<b>AC Output Voltage (RMS)</b>	<b>230 VAC</b>	<b>120 VAC</b>	<b>120 VAC</b>	<b>230 VAC</b>	<b>120 VAC</b>
<b>Nominal Frequency</b>	<b>50 HZ</b>	<b>60 HZ</b>	<b>60 HZ</b>	<b>50 HZ</b>	<b>60 HZ</b>
<i>Continuous Power @ 25°C</i>	500 VA	600VA	1100 VA	1100 VA	1400 VA
<i>Continuous Current @ 25°C</i>	2 amps AC	5 amps AC	9 amps AC	5 amps AC	12 amps AC
<i>Maximum Current (100 mSec Record)</i>	10 amps AC	18 amps AC	22 amps AC	11 amps AC	30 amps AC
<i>Maximum Power (Light Bulb Rating)</i>	2500 W	2500 W	3000 W	3000 W	3400 W
<i>Efficiency (peak)</i>	92% max	92% max	90% max	90% max	92% max

### DC INPUT REQUIREMENTS

<i>Search Mode</i>	0.022 A (0.4W)	0.022 A (0.4W)	0.045 A (0.5W)	0.045 A (0.5W)	0.060 A (0.7W)
<i>On Mode (no load - idle)</i>	0.400 A (5.0W)	0.400 A (5.0W)	0.450 A (5.5W)	0.450 A (5.5W)	0.600 A (7 W)
<i>At Full Rated Power</i>	54 amps	63 amps	120 amps	120 amps	153 amps
<i>Input Voltage Range</i>	10.8 to 15.5 VDC	10.8 to 15.5 VDC	10.8 to 15.5 VDC	10.8 to 15.5 VDC	10.8 to 15.5 VDC
<i>Low Battery Cutout (w/out SB Option)</i>	9.5 VDC	9.5 VDC	9.5 VDC	9.5 VDC	9.5 VDC
<i>High Voltage Cutout</i>	15.7 VDC	15.7 VDC	15.7 VDC	15.7 VDC	15.7 VDC

### AC OUTPUT CHARACTERISTICS

<i>AC Output Waveform</i>	Modified sinewave				
<i>Voltage Regulation</i>	+/- 5% Maximum, +/- 2.5% Typical				
<i>Power Factor Allowed</i>	-1 to 1				
<i>Frequency Regulation</i>	+/- 0.01% (crystal regulated)				

### ENVIRONMENTAL LIMITATIONS

<i>Enclosure Type</i>	Indoor, ventilated, steel chassis with powdercoat finish				
<i>Specified Temperature Range</i>	32°F to 104°F (0°C to +40°C) (output will meet specified tolerances)				
<i>Allowed Operating Temperature Range</i>	-40°F to 140°F (-40°C to +60°C) (output may not meet specified tolerances)				
<i>Dimensions - Inverter Only</i>	10.5" (26.7 cm) high, 15.5" (39.4 cm) wide, 6" (15.2 cm) deep (when wall mounted)				
<i>Dimensions - Shipping</i>	20.5" (52 cm), 27" (69 cm) 15.5" (40 cm)				
<i>Mounting</i>	Wall or Shelf Mount				
<i>Weight - Inverter only</i>	25 lbs (11.4 kg)	25 lbs (11.4 kg)	30 lbs (13.6kg)	35 lbs (15.9 kg)	35 lbs (15.9 kg)
<i>Weight - Shipping</i>	30 lbs (13.6 kg)	30 lbs (13.6 kg)	35 lbs (15.9kg)	40 lbs (18.2 kg)	40 lbs (18.2 kg)

### STAND-BY (SB) OPTION

<i>Automatic AC Transfer Relay</i>	30 amps AC	30 amps AC	30 amps AC	30 amps AC	30 amps AC
<i>Maximum Battery Charging Rate</i>	25 amps DC	25 amps DC	50 amps DC	50 amps DC	50 amps DC
<i>3-stage Charger Regulation Method</i>	<b>Bulk</b> (constant current), <b>Absorption</b> (constant voltage) and <b>Float</b> (maintenance voltage & current)				
<i>Selectable Low Battery Cutout</i>	9.5 VDC (allows deep discharge) or 11.8 VDC ( for use with starting or shallow cycle batteries)				

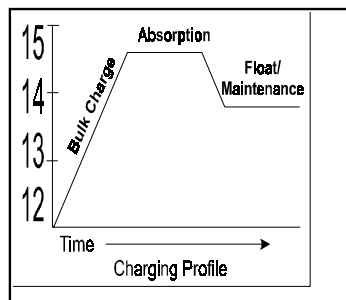
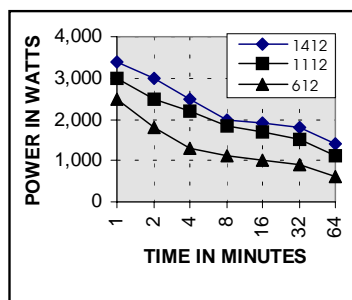
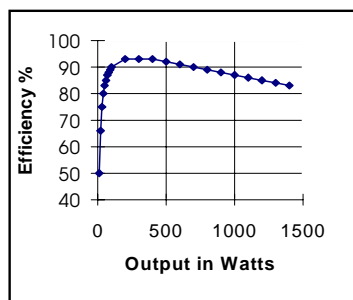
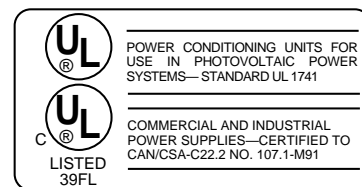
### ADDITIONAL OPTIONS

<i>Battery Temperature Sensor</i>	BTS/15: 15 foot plug-in battery temperature sensor with phone jack (can be extended)				
<i>Remote Control Panel</i>	RC8/50: 50 foot On/Off remote with LED status indicator RC8/100: 100 foot On/Off remote with LED status indicator				

Note: All specifications are subject to change without notice

**Rugged:** Designed for maximum service, all UX models offer powder coated chassis, stainless fasteners, conformal coated circuit boards and gold plated connectors. AC wiring terminates cleanly inside the wall or shelf mountable chassis.

**The Bottom line:** The Trace UX series of compact inverters provides quiet, dependable power whenever and wherever you need it, at a price you can afford.



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