

# Central Lighting Inverter Emergency Power Systems

The Wave Rider I incorporates state of the art technology with PWM (Pulse Width Modulated), standby design for emergency lighting applications.

**The Wave Rider "Energy Conserver" is available in both Fast Transfer and standby models.**

When utility power fails, the Inverter provides uninterrupted output power to the emergency lighting circuits, in compliance with UL924 Life Safety Code for 90 minutes of egress illumination.

The Wave Rider is the best design solution for emergency lighting power for a wide range of commercial and industrial applications.

## KEY FEATURES of the Wave Rider:

- **Fast Transfer - Standby and Double Conversion, "no-break" online systems available.**
- **Efficiency:** 98% Standby - Fast Trans / 94% On-Line
- Built-in Power Factor Correction (Saves approx. 10% on utility bill)
- Automatic monthly and annual self testing
- Latest technology microprocessor controlled electronics with PWM (Pulse Width Modulated) design for true Sine Wave output.
- Continuous self-diagnostic and self-testing system.
- LCD backlit panel for comprehensive monitoring of power line conditions and Inverter status.
- Optional remote monitoring, including the advanced Global Monitoring System (GMS)
- Sealed maintenance-free lead calcium batteries with 10 year prorata warranty.
- Battery Exerciser
- Battery Sentinel Battery Monitoring System
- Modular cabinet design for ease of installation, small footprint with shallow 18" depth, convenient front access, optional certified Zone 4 Seismic brackets available.
- Generator Compatible
- 1 Year Warranty



## LIFE-LINE Wave Rider™ I CENTRAL LIGHTING INVERTER

# Leader in LED!

Title 24 inspired

### Applications

For a wide range of commercial and industrial applications, from 2,100 to 17,000 watts.

Typical installations:

- Office Buildings
- Factories
- Hospitals
- Hotels & Motels
- Schools & Universities
- Shopping Centers
- Casinos
- Airports
- Military Installations
- Apartment Buildings
- Supermarkets
- Train & Bus Terminals



## 2.1 to 17 KW, Single Phase (UPS or IPS)

### Standby or Fast Transfer (under 2ms)

HID, Incandescent, Fluorescent, LED  
120, 208, 240, 277, or 480 Volts

Listed to UL924 Lighting  
and UL1778 UPS Standards, by CSA

## A Full Line Power Protection Company.

# Wave Rider I Specifications

**POWER RATING:** 2.1, 3, 5, 6, 7.5, 8, 10, 12.5, 15, and 17 KW

**Input Voltage:** 2.1- 6, & 8KW; 120, 208, 240, 277, or 480 VAC (-20% to +15%)  
7.5, 10-17kW; 208, 240, 277, or 480 VAC (-15% to +15%);  
120V - Special Order

**Output Voltage:** 120, 208, 240, 277, or 480 VAC

**OUTPUT FREQUENCY (Inverter Operation):** 60Hz ±0.5Hz.

**VOLTAGE REGULATION:** ±3%

**OUTPUT WAVE FORM:** Sine-wave

**NOISE ISOLATION:** -120 dB. Common-Mode.; 60 dB. Transverse-Mode

**EFFICIENCY:** 98% Standby - Fast Transfer / 94% Online

**CREST FACTOR:** 3:1 Typical (may vary by model)

**ENVIRONMENTAL:**

**Humidity:** 0-95% RH w/no condensation

**Operating temperature:** UPS: -0° to 40°C. (32° to 104°F)

BATTERY: 20° to 25°C (68° to 77°F)

**Storage temperature:** -20° to 25°C. (-4 to 77°F)

**SAFETY AGENCIES:**

CSA Listed to UL 924, UL 924A, UL 1778, NFPA101, NFPA70, NEC, and OSHA.

KW	Input/Output Voltages	MODEL NUMBERS	DC Volts	BTU/ Hr	Cabinet Size (W x H x D)	Wgt (lbs)
2.1	120/120	WR3.0A0100N1-VA	96	859	39" x 48" x 18"	826
	208/208	WR3.0B1300N1-VA		859		826
	240/240	WR3.0D0400N1-VA		859		826
	277/277	WR3.0R2500N1-VA		859		826
	120,208,240,277,or 480	**WR3.0X5800T1-VA		1166		896
3.0	120/120	WR3.0A0100N1	96	1227	39" x 48" x 18"	996
	208/208	WR3.0B1300N1		1227		996
	240/240	WR3.0D0400N1		1227		996
	277/277	WR3.0R2500N1		1227		996
	120,208,240,277,or 480	**WR3.0X5800T1		1433		1066
5.0	120/120	WR5.0A0100N1	120	1875	39" x 68" x 18"	1214
	208/208	WR5.0B1300N1		1875		1214
	240/240	WR5.0D0400N1		1875		1214
	277/277	WR5.0R2500N1		1875		1214
	120,208,240,277,or 480	**WR5.0X5800T1		2047		1284
6.0	120/120	WR6.0A0100N1	144	2630	39" x 68" x 18"	1224
	208/208	WR6.0B1300N1		2416		1224
	240/240	WR6.0D0400N1		2416		1224
	277/277	WR6.0R2500N1		2416		1224
	120,208,240,277,or 480	**WR6.0X5800T1		2630		1284
*7.5	208/208	WR7.5B1300N1	120	2819	51" x 70" x 30.5"	2190
	240/240	WR7.5D0400N1		2819		2190
	277/277	WR7.5R2500N1		2819		2190
	208, 240, 277,or 480	**WR7.5X5800T1		3070		2350
8.0	120/120	WR8.0A0100N1	192	3278	39" x 68" x 18"	1289
	208/208	WR8.0B1300N1		3004		1289
	240/240	WR8.0D0400N1		3004		1289
	277/277	WR8.0R2500N1		3004		1289
	120,208,240,277,or 480	**WR8.0X5800T1		3278		1464
*10	208/208	WR010B1300N1	192	3755	51" x 70" x 30.5"	2695
	240/240	WR010D0400N1		3755		2695
	277/277	WR010R2500N1		3755		2695
	208, 240, 277,or 480	**WR010X5800T1		4094		2870
*12.5	208/208	WR012B1300N1	192	4696	51" x 70" x 30.5"	3557
	240/240	WR012D0400N1		4696		3557
	277/277	WR012R2500N1		4696		3557
	208, 240, 277,or 480	**WR012X5800T1		5118		3777
*15	208/208	WR015B1300N1	240	5608	51" x 70" x 30.5"	4172
	240/240	WR015D0400N1		5608		4172
	277/277	WR015R2500N1		5608		4172
	208, 240, 277,or 480	**WR015X5800T1		6141		4512
*17	208/208	WR017B1300N1	240	5608	51" x 70" x 30.5"	4172
	240/240	WR017D0400N1		5608		4172
	277/277	WR017R2500N1		5608		4172
	208, 240, 277,or 480	**WR017X5800T1		6141		4512

Specifications are subject to change without prior notification

\* Consult factory for 120V Input Units and other Power Ratings.

\*\* Input Voltage "X": A=120 (2.1 to 10kW only), B=208, D=240, R=277, H=480 VAC

Output Voltage "58": 120, 208, 240, 277, and 480 VAC

All units are 90 minutes Battery Back-up time @ full Load.  
For other back-up times (up to 6 hours), consult factory

6005-204 Rev.D 0116 © Copyright Crucial Power Products All rights reserved.

**OPTIONAL INPUT PROTECTION:** Input Circuit Breaker provided protection to the unit, load, and personnel. Input Circuit Breaker is rated at (10 KAIC) standard and higher interruption up to 65 (KAIC) optional.

**OUTPUT PROTECTION:** Internal Electronic overload protection. Circuit breaker provides inherent over-load protection. Factory selectable voltage 120, 208, 240, or 277 for input or output voltages. If input is different from output or output different from input, an internally mounted transformer is required.

**SURGE PROTECTION:** The inverter will protect itself and the load against surge as defined in ANSI/IEEE C62.45 category A and B.

**ISOLATION:** Output is completely isolated from input, and with multi voltages, when input & output is different.

**BATTERY:** Sealed maintenance free (SMF), Lead Calcium

**Battery Management System:** Utilizes a microprocessor technology to monitor the batteries critical levels and apply charging cycles in a method to substantially increase battery life.

**HOUSING:** Free standing NEMA 1 Enclosure powder coated paint Front access only Multiple conduit entries Refer to chart for dimensions

**RECHARGE TIME:** per conform UL924

**OPTIONS**

- Secondary Auxiliary Circuit Breakers: Normally On, Normally Off, Normally Off w/ Delay, Trip Alarm
- Form 'C' Contacts (5), (N.O.)
- Secondary Normally On/Off Terminal Block selection
- Remote Status Panel Unit with Audio Alarm and Silence Switch
- Local Audio Alarm with Silence Switch
- Make Before Break Internal Maintenance Bypass Switch
- External Maintenance Bypass Switch (wrap around type)
- Main Input and/or Output Circuit Breaker (with custom KAIC)
- Built-in Secondary Distribution
- Input Transient Voltage Surge Suppressor (TVSS)
- Harmonic Tolerance (up to K-50)
- EMI Filter
- Certified Zone 4 Seismic Bracket
- Extended Warranty and Service Plans
- Spare Part Kits Available
- Long Life Battery
- Global Monitoring System (GMS)
- LOCAL
  - Local PC via RS232 and RS485
  - Event logging up to 500
- REMOTE
  - Dial-up
    - Voice (10 event logging), numeric pager
    - Voice, data, fax, pager, PC, e-mail, event logging up to 500
    - Voice, data, fax, pager, PC, e-mail, and measurement (500 event logging plus graphic)
  - Web/SNMP:
    - System status, measurement, alarm notification, event logging and password protected configuration.

Consult Factory for more features and choices of remote communication.



14000 S. Broadway, Los Angeles, CA 90061  
**Tel: (800) 244-4069 • Fax: (800) 246-2346**  
 www.crucialpower.com  
 email: info@crucialpower.com