Central Lighting Inverter Emergency Power Systems

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

The Wave Rider is available in both online, 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:

- **Built-in Power Factor Correction** *(Saves approx. 10% on utility bill)*
- **Both Standby and Double Conversion, "no-break" online system powers all lamp types, including HID.**
- **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.**
- **Efficiency: 94% Online / 98% Standby**
- **Optional remote monitoring, including the advanced Global Monitoring System (GMS)**
- **Sealed maintenance-free lead calcium batteries with 10 year prorata warranty.**
- **Battery Exerciser**
- **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**

CRUCIAL POWER PRODUCTS

LIFE-LINE

Wave Rider™ I

CENTRAL LIGHTING INVERTER

New Cabinet Size
5.25 - 17kW

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)

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

KW	Input/Output Voltages	MODEL NUMBERS	DC Volts	BTU/ Hr	Cabinet Size (W x H x D)	Wgts (lbs)
2.1	120/120 208/208 240/240 277/277 120,208,240,277,or 480	WR3.0A0100N1-VA WR3.0B1300N1-VA WR3.0D0400N1-VA WR3.0R2500N1-VA **WR3.0X5800T1-VA	96	859	39" x 48" x 18"	826 826 826 826 896
3.0	120/120 208/208 240/240 277/277 120,208,240,277,or 480	WR3.0A0100N1 WR3.0B1300N1 WR3.0D0400N1 WR3.0R2500N1 **WR3.0X5800T1	96	1227	39" x 48" x 18"	996 996 996 996 1066
3.5	120/120 208/208 240/240 277/277 120,208,240,277,or 480	WR5.0A0100N1-VA WR5.0B1300N1-VA WR5.0D0400N1-VA WR5.0R2500N1-VA **WR5.0X5800T1-VA	120	1314	39" x 68" x 18"	1101 1101 1101 1101 1171
5.0	120/120 208/208 240/240 277/277 120,208,240,277,or 480	WR5.0A0100N1 WR5.0B1300N1 WR5.0D0400N1 WR5.0R2500N1 **WR5.0X5800T1	120	1875	39" x 68" x 18"	1214 1214 1214 1214 1284
***5.25**	208/208 240/240 277/277 208, 240, 277,or 480	WR7.5B1300N1-VA WR7.5D0400N1-VA WR7.5R2500N1-VA **WR7.5X5800T1-VA	120	1973	51" x 70" x 30.5"	1506 1506 1506 1666
***7**	208/208 240/240 277/277 208, 240, 277,or 480	WR010B1300N1-VA WR010D0400N1-VA WR010R2500N1-VA **WR010X5800T1-VA	192	2629	51" x 70" x 30.5"	1867 1867 1867 2042
***7.5**	208/208 240/240 277/277 208, 240, 277,or 480	WR7.5B1300N1 WR7.5D0400N1 WR7.5R2500N1 **WR7.5X5800T1	120	2819	51" x 70" x 30.5"	2190 2190 2190 2350
***8.8**	208/208 240/240 277/277 208, 240, 277,or 480	WR012B1300N1-VA WR012D0400N1-VA WR012R2500N1-VA **WR012X5800T1-VA	192	3287	51" x 70" x 30.5"	2352 2352 2352 2572
***10**	208/208 240/240 277/277 208, 240, 277,or 480	WR010B1300N1 WR010D0400N1 WR010R2500N1 **WR010X5800T1	192	3755	51" x 70" x 30.5"	2695 2695 2695 2870
***10.5**	208/208 240/240 277/277 208, 240, 277,or 480	WR015B1300N1-VA WR015D0400N1-VA WR015R2500N1-VA **WR015X5800T1-VA	240	3926	51" x 70" x 30.5"	2792 2792 2792 3132
***12.5**	208/208 240/240 277/277 208, 240, 277,or 480	WR012B1300N1 WR012D0400N1 WR012R2500N1 **WR012X5800T1	192	4696	51" x 70" x 30.5"	3557 3557 3557 3777
***14**	208/208 240/240 277/277 208, 240, 277,or 480	WR020B1300N1-VA WR020D0400N1-VA WR020R2500N1-VA **WR020X5800T1-VA	240	5257	51" x 70" x 30.5"	4172 4172 4172 4512
***15**	208/208 240/240 277/277 208, 240, 277,or 480	WR015B1300N1 WR015D0400N1 WR015R2500N1 **WR015X5800T1	240	5608	51" x 70" x 30.5"	4172 4172 4172 4512
***17**	208/208 240/240 277/277 208, 240, 277,or 480	WR017B1300N1 WR017D0400N1 WR017R2500N1 **WR017X5800T1	240	5608	51" x 70" x 30.5"	4172 4172 4172 4512

* 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

POWER RATING:
2.1, 3, 3.5, 5, 5.25, 7, 7.5, 8.8, 10, 10.5, 12.5, 14, 15, and 17 KW

Input Voltage
2.1 - 5KW ....120, 208, 240, 277, or 480 VAC (-20% to +15%)
5.25 - 17kW ..... 208, 240, 277, or 480 VAC (-15% to +15%)

Output Voltage
2.1 - 5KW ....120, 208, 240, 277, or 480 VAC
5.25 - 17kW ..... 208, 240, 277, or 480 VAC

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

VOLTAGE REGULATION: ±3%

OUTPUT WAVE FORM: Sine-wave

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.

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

EFFICIENCY: 94% Online / 98% Standby

CREST FACTOR: 3.1 Typical (may vary by model)

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

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, UL1778, NFPA101, NFPA70, NEC, and OSHA.

Specifications are subject to change without prior notification

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