WR-I Single Phase Inverter

PROJECT: FIXTURE TYPE: LOCATION: CONTACT/PHONE:

CENTRAL LIGHTING INVERTER

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 always online, eliminating noise, spikes, sags and brownouts. 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.

PRODUCT FEATURES

- 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 selftesting 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

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



LIFE-LINE Wave Rider™I central lighting inverter

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



WR-I Single Phase Inverter



LIGHTING INVERTER

| кw | Input/Output Voltages | | DC E olts | BTU/ Hr | Cabinet Size (W x H x D) | Wgts (lbs) |
|-------|---|---|--------------|--------------------------------------|------------------------------|--|
| 2.1 | 20/ 20 208/208 240/240 277/277 20,208,240,277,or 480 | WR3.0A0100N1-VA WR3.0B1300N1-VA WR3.0D0400N1-VA WR3.0R2500N1-VA **WR3.0X5800T1-VA | 96 | 859 859 859 859 1166 | 39" x 48" x 18" | 826 826 826 826 896 |
| 3.0 | 20/ 20 208/208 240/240 277/277 20,208,240,277,or 480 | WR3.0A0100N1 WR3.0B1300N1 WR3.0D0400N1 WR3.0R2500N1 **WR3.0X5800T1 | 96 | 227 227 227 227 433 | 39" x 48" x 18" | 996 996 996 996 1066 |
| 5.0 | 20/ 20 208/208 240/240 277/277 20,208,240,277,or 480 | WR5.0A0100N1 WR5.0B1300N1 WR5.0D0400N1 WR5.0R2500N1 **WR5.0X5800T1 | 120 | 1875 1875 1875 1875 2047 | 39" x 68" x 18" | 1214 1214 1214 1214 1214 1284 |
| 6.0 | 20/120 208/208 240/240 277/277 20,208,240,277,or 480 | WR6.0A0100N1 WR6.0B1300N1 WR56.0D0400N1 WR6.0R2500N1 **WR6.0X5800T1 | 144 | 2630 2416 2416 2416 2630 | 39" x 68" x 18" | 1224 1224 1224 1224 1224 1284 |
| *7.5 | 208/208 240/240 277/277 208, 240, 277,or 480 | WR7.5B1300N1 WR7.5D0400N1 WR7.5R2500N1 **WR7.5X5800T1 | 120 | 2819 2819 2819 3070 | 51" x 70" x 30.5" | 2190 2190 2190 2350 |
| 8.0 | 120/120 208/208 240/240 277/277 120,208,240,277,or 480 | WR8.0A0100N1 WR8.0B1300N1 WR8.0D0400N1 WR8.0R2500N1 **WR8.0X5800T1 | 192 | 3278 3004 3004 3004 3278 | 39" x 68" x 18" | 1289 1289 1289 1289 1289 1464 |
| *10 | 208/208 240/240 277/277 208, 240, 277,or 480 | WR010B1300N1 WR010D0400N1 WR010R2500N1 **WR010X5800T1 | 192 | 3755 3755 3755 4094 | 51" x 70" x 30.5" | 2695 2695 2695 2870 |
| *12.5 | 208/208 240/240 277/277 208, 240, 277,or 480 | WR012B1300N1 WR012D0400N1 WR012R2500N1 **WR012X5800T1 | 192 | 4696 4696 4696 5118 | 51" x 70" x 30.5" | 3557 3557 3557 3777 |
| *15 | 208/208 240/240 277/277 208, 240, 277,or 480 | WR015B1300N1 WR015D0400N1 WR015R2500N1 **WR015X5800T1 | 240 | 5608 5608 5608 6141 | 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 5608 5608 6141 | 51" x 70" x 30.5" | 4172 4172 4172 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

POWER RATING: 2.1, 3, 5, 7.5, 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, UL1778, NFPA101, NFPA70, NEC, and OSHA.

- **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 (add suffix to model #)

 (OCB #)Secondary Auxiliary Circuit Breakers: Normally On, Normally Off, Normally Off w/ Delay, Trip Alarm

- (FCC) Form 'C' Contacts (5), (N.O.)
- (STB) Secondary Normally On/Off Terminal Block selection

 (RSP) Remote Status Panel Unit with Audio Alarm and Silence Switch

- (LAA) Local Audio Alarm with Silence Switch
- (IMB) Make Before Break Internal Maintenance Bypass Switch
- (EMB) External Maintenance Bypass Switch (wrap around type)
- (MIB) Main Input Circuit Breaker (with custom KAIC)
- (TVSS) Input Transient Voltage Surge Suppressor
- (HT) Harmonic Tolerance (up to K-50)
- (EMI) EMI Filter
- (SB) Certified Zone 4 Seismic Bracket
- (EW #) Extended Warranty and Service Plans
- Global Monitoring System (GMS)
- LOCAL
 - Local PC via RS232 and RS485
 - Event logging up to 500
 - 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

<u>REMOTE</u> ■ Dial-up