

Central Lighting Inverter (kVA) 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 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.

KEY FEATURES of the Wave Rider:

- 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.
- 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



LIFE-LINE Wave Rider™ I CENTRAL LIGHTING INVERTER

Applications

For a wide range of commercial and industrial applications, from 2,100 to 14,000 watts.

Typical installations:

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



Product offered
in 0.7 Power Factor for VA & KVA

3 to 20 KVA,
Single Phase

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

Listed to UL924 Lighting
and UL1778 UPS Standards, by CSA

A Full Line Power Protection Company.

Wave Rider I (kVA) Specifications

POWER RATING:

3, 5, 7.5, 10, 12.5, 15, and 20 KVA

INPUT VOLTAGE:

3 & 5 KVA120, 208, 240, or 277 VAC
(-20% to +15%)

7.5, 10, 12.5, 15, & 20 KVA 208, 240
or 277VAC (-15% to +15%)

OUTPUT VOLTAGE:

120 (3 & 5 KVA), 208, 240 or 277 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 overload 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.

Power Factor: 0.7

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: 90% minimum

CREST FACTOR:

3.1 Typical (may vary by model)

BATTERY: Sealed maintenance free (SMF).

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, and UL1778

STANDARD FEATURES

- Back-lit LCD Display for monitoring
- RS 232 & RS 485 ports for metering, measuring, and diagnostic.
- System pre-wired for optional Global Monitoring System (GMS)
- Battery Breaker
- Inverter Test Switch
- Generator Compatible with Automatic Governor (Slew Rate 2Hz/sec.)
- Battery Management Software
- High Frequency PWM with Digital Signal Processing Technology
- Built-in Input Power Factor Correction

OPTIONS

- Secondary Auxiliary Circuit Breakers (up to 12 one-pole OCB's):
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
- Stackable Cabinet Rack to save floor space
- Certified Zone 4 Seismic Bracket
- Extended Warranty and Service Plans
- Spare Part Kits Available
- **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.

KVA/ KW	Input/Output Voltages	MODEL NUMBERS	DC Volts	BTU/ Hr	Cabinet Size UPS (Battery) (W x H x D)	Weights (lbs)	
						UPS	Battery
3.0/ 2.1	120/120	WR3.0A0100NI-VA	96	859	39" x 48" x 18"	826	N/A
	208/208	WR3.0B1300NI-VA		859		826	
	240/240	WR3.0D0400NI-VA		859		826	
	277/277	WR3.0R2500NI-VA		859		826	
	120, 208, 240, or 277	**WR3.0X5800TI-VA		1166		896	
5.0/ 3.5	120/120	WR5.0A0100NI-VA	120	1314	39" x 68" x 18"	1101	N/A
	208/208	WR5.0B1300NI-VA		1314		1101	
	240/240	WR5.0D0400NI-VA		1314		1101	
	277/277	WR5.0R2500NI-VA		1314		1101	
	120, 208, 240, or 277	**WR5.0X5800TI-VA		1433		1171	
*7.5/ 5.2	208/208	WR7.5B1300NI-VA	120	1973	39" x 68" x 18"	1506	N/A
	240/240	WR7.5D0400NI-VA		1973		1506	
	277/277	WR7.5R2500NI-VA		1973		1506	
	208, 240, or 277	**WR7.5X5800TI-VA		2150		1666	
*10/ 7	208/208	WR010B1300NI-VA	192	2629	39" x 68" x 18" (39" x 48" x 18")	1080	787
	240/240	WR010D0400NI-VA		2629		1080	
	277/277	WR010R2500NI-VA		2629		1080	
	208, 240, or 277	**WR010X5800TI-VA		2866		1255	
*12.5/ 8.8	208/208	WR012B1300NI-VA	192	3287	39" x 68" x 18" (39" x 48" x 18")	1305	1047
	240/240	WR012D0400NI-VA		3287		1305	
	277/277	WR012R2500NI-VA		3287		1305	
	208, 240, or 277	**WR012X5800TI-VA		3583		1525	
*15/ 10.5	208/208	WR015B1300NI-VA	240	3926	39" x 68" x 18" (39" x 48" x 18")	1545	1247
	240/240	WR015D0400NI-VA		3926		1545	
	277/277	WR015R2500NI-VA		3926		1545	
	208, 240, or 277	**WR015X5800TI-VA		4299		1885	
*20/ 14	208/208	WR020B1300NI-VA	240	5257	39" x 68" x 18" (39" x 48" x 18")	1999	2173
	240/240	WR020D0400NI-VA		5257		1999	
	277/277	WR020R2500NI-VA		5257		1999	
	208, 240, or 277	**WR020X5800TI-VA		5732		2559	

* Input Voltage X A=120 (3 & 5 KVA only), B=208, D=240, R=277 VAC

* Output Voltage YZ 01=120, 13=208, 04=240, 25=277 VAC

All units are 90 minutes Battery Back-up time @ full Load.

For other back-up times (up to 6 hours), consult factory

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