

Central Lighting Inverter

Three Phase (UPS or IPS)
Online or Fast Transfer (under 2ms)
LED, Incandescent, Fluorescent, HID
208Y/120 or 480Y/277 VAC
Listed to UL924 lighting
and UL1778 UPS Standards, by CSA



Wave Rider™ 3 8 to 50KW

Key Features:

- **Double Conversion, fast transfer or stand by systems available to power all lamp types, including HID, LED**
- **Efficiency: 98% Standby - Fast Trans / 94% On-Line (Typical)**
- **Automatic monthly and annual self testing**
- **Latest technology microprocessor controlled electronics with PWM (Pulse Width Modulated) design for true Sign 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)**
- **Battery Exerciser**
- **Optional Battery Sentinal Battery Monitoring System**

The Wave Rider 3 incorporates state of the art technology with PWM (Pulse Width Modulated), double conversion design for emergency lighting applications. 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 3 is the best design solution for emergency lighting power for a wide range of commercial and industrial applications.

- **Sealed maintenance-free lead calcium batteries with 10 year prorata warranty.**
- **Optional RS232 and RS485**
- **Modular cabinet design for ease of installation, small footprint with shallow 18" depth, convenient front access.**
- **Generator compatible**
- **2 Year Warranty* (optional)**

*Second Year, months 13 to 24 only valid with factory performed preventive maintenance

Wave Rider™ 3 Specifications

Power Factor: 1.0
Power Rating: 8, 12, 16, 20, 24, 32, 40 and 50 KW
Input Voltage: 208Y/120 or 480Y/277 VAC (-20% to +15%)
Output Voltages: 208Y/120 or 480Y/277 VAC
Output Frequency (Inverter Operation): 60 Hz ±0.5 Hz
Voltage Regulation: ±3%, Regulated within CBEMA curve
Output Wave Form: Sine-Wave < 5% THD.
Efficiency: 94% Online / 98% Standby - Fast Transfer (Typical)
Crest Factor: 3:1 Typical
Surge Protection: The inverter will protect itself and the load against surges as defined in ANSI/IEEE C62.41 Categories A and B.
Isolation: Complete from line. Output neutral bonded to ground
Noise Isolation: -120 dB Common-Mode; -60 dB Transverse-Mode

Battery: 10 year pro rated maintenance-free (AGM) battery
Recharge Current: Conforms to UL924 Standards
External Battery: Provisions for hardwire connection of optional external battery cabinets or DC source.
Environmental:
Humidity: 0 - 95% RH w/ no condensation
Operating Temperature: UPS: 0° to 40°C. (32°-104°F) Battery: 20° to 25°C. (68°-77°F)
Storage Temperature: -20° to 25°C. (-4° - 77°F)
Altitude: Up to 10,000 ft
Safety Agencies: CSA Listed to UL1778, UL924, NFPA101, NFPA70, NEC, and OSHA
Cabinet Sizes: Standard Cabinet Layout: Inverter Cab. 39"W x 18"D x 68"H Battery Cab. 51"W x 30.5"D x 70"H

STANDARD FEATURES

- On-Line Central Lighting Inverter
- Back-lit LCD Display (4 lines) for monitoring
- Pre-wired for Global Monitoring System (GMS)
- High Frequency PWM with Digital Signal Processing Technology
- Make Before Break Internal Maint. Bypass Switch
- Input and Output Circuit Breaker
- Generator Compatible with Automatic Governor (Slew Rate 2Hz/sec.)
- Inverter Test Switch
- Battery Breaker
- Battery Management Software
- Automatically tests every 30 days and 12 months

Options

- Fast Transfer (Under 2ms)
- Secondary Auxiliary Circuit Breakers (Up to 20 positions): Normally On, Normally Off,
- Normally Off w/ Delay, Trip Alarm
- Aux CB with Trip indicator
- Dry Contact: With Single Common and N/O, N/C contacts with individual isolated Common
- Secondary Normally On/Off Terminal Block selection
- Remote status panel unit with audio alarm and silence switch
- Local Audio Alarm with Silence Switch
- Input current harmonic filter, 10% & 5% (This option will not be offered with secondary auxiliary circuit breakers)
- Main Input and/or Output Circuit Breaker (with custom KAIC)
- EMI Filter
- Delta Input (using external transformer)
- 4 position External wrap around Bypass Switch
- Battery Cabinet Fan Exhaust (also with Dry Contact)
- Battery Thermal Runaway with Dry Contact
- Battery to Normal power, Adjustable Time Delay
- 42 Position Panel Board: Attachable, free standing, ships loose (with main disconnect)
- Wireless battery monitoring system: Ability to monitor individual batteries including battery impedance
- Input Transient Voltage Surge Suppressor (TVSS)
- Harmonic Tolerance (up to K-50)
- Certified Zone 4 Seismic Bracket
- Extended Warranty and Service Plans
- 12 Hour Battery charger
- **G-Battery (Seal Lead-Calcium VRLA Battery):**
Maintenance free batter that requires no addition of water over the life of the battery. 20-years Warranty Life (may increase cabinet size) at 77°F (25°C). Warranty is two-years full replacement plus an additional eighteen years pro-rata.
- **Global Monitoring System (GMS)**
- LOCAL
 - Local PC via RS232 and RS485
 - Event logging up to 500 with touchscreen
- REMOTE
 - Web/SNMP: System status, measurement, alarm notification, event logging and password protected configuration.

KW	INPUT/OUTPUT VOLTAGES	MODEL NUMBERS	DC VOLTS	BTU/HR	TOTAL WEIGHT (LBS)	
					INVERTER CAB.	(QTY) BATTERY CAB
8	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR010B05LHT3-VA WR010H09LHT3-VA WR010H05LHT3-VA	192	3032	(1 Cabinet) 1083 lbs	39W x 18D x 68H (1 Cabinet) 1392 lbs
12	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR015B05LHT3-VA WR015H09LHT3-VA WR015H05LHT3-VA	192	4549	(1 Cabinet) 1446 lbs	51W x 30.5D x 68H (1 Cabinet) 3224 lbs
16	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR020B05LHT3-VA WR020H09LHT3-VA WR020H05LHT3-VA	192	6066	(1 Cabinet) 1679 lbs	51W x 30.5D x 68H (1 Cabinet) 3560 lbs
20	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR025B05LHT3-VA WR025H09LHT3-VA WR025H05LHT3-VA	288	7582	(1 Cabinet) 1679 lbs	51W x 30.5D x 68H (1 Cabinet) 4545 lbs
24	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR030B05LHT3-VA WR030H09LHT3-VA WR030H05LHT3-VA	288	9098	(1 Cabinet) 1719 lbs	51W x 30.5D x 68H (1 Cabinet) 4568 lbs
32	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR040B05LHT3-VA WR040H09LHT3-VA WR040H05LHT3-VA	312	12131	(1 Cabinet) 2066 lbs	51W x 30.5D x 68H (2 Cabinets) 8664 lbs
40	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR050B05LHT3-VA WR050H09LHT3-VA WR050H05LHT3-VA	480	15164	(1 Cabinet) 2463 lbs	51W x 30.5D x 68H (2 Cabinets) 8800 lbs
50	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	WR050B05LHT3 WR050H09LHT3 WR050H05LHT3	480	18000	(1 Cabinet) 2565 lbs	51W x 30.5D x 68H (2 Cabinets) 12700 lbs

* Total Weight/BTU are approximate.
 Standard Battery Back-up time is 90 minutes @ full load.
 Other back-up times are available - contact factory.
 Consult Factory for more features and choices of remote communication.
 Consult Factory for exact number of battery cabinets

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