

# CRUCIAL POWER PRODUCTS

Seismic Certified to SDS Level 3.0g  
Listed to CBC2016, IBC2015, AC156



**SHAKER TABLE TESTED**  
Central Lighting Inverter

**Wave Rider 1™**

Single Phase, 2.1 to 17KW

**Wave Rider 3™**

Three Phase, 8 to 17KW

**HCAI CERTIFIED**

(Formerly OSHPD)

OSP No.: OSP-0499-10

## Key Features:

- **HCAI Compliant (Formerly OSHPD) Certification OSP-0499**
- **Listed to UL924 and UL1778 by CSA**
- **LCD Panel for Monitoring**
- **98% typ. Efficiency Fast Transfer**
- **94% typ. Efficiency Online**
- **Pulse Width Modulated (PWM)**
- **Generator Compatible with Auto Governor**
- **Double Conversion Technology**
- **Battery Exerciser**
- **Inverter Test Switch**
- **Global Monitoring System (optional)**
- **Battery Monitoring System (optional)**
- **2 Year Warranty\* (optional)**

The Wave Rider 1 & 3 has met the highest standards of seismic testing. Shaker table testing is in accordance with ICC-ES-AC-156 to an SDS level of 3.0g. We also meet the requirement for CBC 2016, IBC 2015 and test criteria ICC-ES AC156. The Wave Rider 1 & 3 have also met the certification for HCAI (formerly OSHPD).

## Wave Rider 1

This single phase unit is an on-line double conversion with many options available. This unit is available from 2.1-17kW. It will support ALL TYPES of lighting including LED and HID. The Wave Rider 1 is also available as a Fast Transfer.

## Wave Rider 3

This 3 phase system is available from 8-50kW. It will support all types of lighting including LED and HID. The Wave Rider 3 is available as a Fast Transfer unit under 2 milliseconds or it can be On line.

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

# HCAI Wave Rider™ 1 & 3 Specification

(Formerly OSHPD)

## HCAI Certified Wave Rider 1

Shock and Vibration	MODEL NUMBERS						
	UNIT NAME	CAPACITY KW		INPUT VOLTAGES	OUTPUT VOLTAGES	TRANSFORMER	PHASE
SV- WR Wave Rider 1	WR	2.1	2.1kW	A 120V	0100 120V	N No Transformer (Same Input and Output Volt)	1 Single Phase
		3.0	3kW	B 208V	1300 208V		
		5.0	6kW	D 240V	0400 240V		
		6.0	8kW	R 277V	2500 277V		
		8.0	10kW	H 480V Transformer	58A0 120/240V	T Transformer (Different Input & Output Voltages)	
		010	12.5kW		58B0 277/120V (50% Load)		
		015	15kW		58C0 480V		
		017	17kW		58D0 480/277V (50% Load)		

## STANDARD FEATURES

- Back-lit LCD Display for monitoring
- Built-in Input Power Factor Correction (1Ø only)
- High Freq. PWM with Digital Signal Processing Tech
- Main Input and Output Circuit Breaker (3Ø only)
- Generator Compatible w/ Auto Governor (Slew Rate 2Hz/sec.)
- Inverter Test Switch and Battery Breaker
- Input Transient Voltage Surge Suppressor (TVSS) (3Ø only)
- Make Before Break Internal Maint. Bypass Switch (3Ø only)

## OPTIONS

- Output Auxiliary Built in Distribution: Normally On, Normally Off, Normally Off with Time Delay
- Custom KAIC Main Input and/or Output Circuit Breaker
- Input Transient Voltage Surge Suppressor
- Fast Transfer
- External Wrap Around Maintenance Bypass Switch (This option cannot be ordered with Secondary Auxiliary Circuit Breakers), 4 Pole
- Dry Contact Normally Open
- Dry Contact "Form C" Normally Open and/or Normally Closed
- Battery Thermal Runaway
- Local Event Logger
- Long Life Battery (May change cabinet size)
- Remote Status Panel Unit with Audio Alarm and Silence Switch
- Local Audio Alarm with Silence Switch
- RS232 or RS485 for dedicated computer
- Global Monitoring System for remote computer with Event
- Log, Texting, and Email capability: SNMP, SNMP with GPRS, WIFI, Modem
- Extended Warranty and Service Plans
- Wireless Battery Monitoring System: Ability to monitor individual batteries including battery impedance
- Battery to normal power, adjustable time delay
- Main Input and Output Circuit Breaker (optional 1Ø, standard for 3Ø)
- Make Before Break Internal Maintenance Bypass Switch (optional 1Ø, standard for 3Ø)
- Touch Screen Local Event Logger (3Ø only)
- Battery Cabinet Fan Exhaust, option for Dry Contact (3Ø only)
- Delta Input (Using external transformer) (3Ø only)

KW	WEIGHT	*CABINET SIZE (W" x H" x D")
2.1	826 lbs	46 X 68 X 18
3.0	1284 lbs	46 X 68 X 18
5.0	1284 lbs	46 X 68 X 18
6.0	1340 lbs	46 X 68 X 18
8.0	1795 lbs	58.75 X 70 X 30.5
10.0	2438 lbs	58.75 X 70 X 30.5
12.5	3681 lbs	58.75 X 70 X 30.5
15.0	3852 lbs	58.75 X 70 X 30.5
17.0	4512 lbs	58.75 X 70 X 30.5

\* Cabinet includes Battery and total cabinet size includes seismic brackets on both sides.

### Model Number Example: SV-WR3.0A0100N1

Single Phase Wave Rider 1, 3kW, 12V Input Voltage, 120 Output Voltage, No Panelboard, No Transformer

## HCAI Certified Wave Rider 3

Shock and Vibration	MODEL NUMBERS					
	UNIT NAME	CAPACITY (KW)		INPUT VOLTAGES	OUTPUT VOLTAGES	3 PHASE LH SERIES
SV- WR Wave Rider 3	WR	010	8kW	B 208Y/120V	0500 208Y/120V	LHT3-VA KVA Rating
		015	12kW			
		020	16kW			
		025	20kW			
		030	24kW	H 480Y/277V	0900 480Y/277V	
		040	32kW			
		050	40kW			
		050	50kW			LHT3 KW Rating

### Model Number Example: SV-WR015B09LHT3-VA

Three Phase Wave 3, 12kW, 208Y/120V Input Voltage, 480Y/277 Output Voltage

KW	Inverter Cabinet (W" x H" x D")		Battery Cabinet (W" x H" x D")		
	Cabinet Size *(Footprint)	Weight	Cabinet Size *(Footprint)	Qty.	Total Wgts.
8	39 x 68 x 18 (46 x 68 x 18)	1083 lbs.	39 x 68 x 18 (46 x 68 x 18)	1	1392 lbs.
12		1446 lbs.	51 x 70 x 30.5 (58.75 x 70 x 30.5)	1	3224 lbs.
16		1679 lbs.		1	3560 lbs.
20		1679 lbs.		1	4545 lbs.
24		1719 lbs.		1	4568 lbs.
32		2066 lbs.		2	8664 lbs.
40		2463 lbs.		2	8800 lbs.
50		2565 lbs.	2	12700 lbs.	

\* Foot Print includes seismic brackets on both sides. Specifications are subject to change without prior notification.



Los Angeles, CA • Tel: (800) 244-4069  
www.crucialpower.com  
email: info@crucialpower.com