

Central Lighting Inverter

Three Phase
208Y/120 or 480Y/277 VAC
Modular design, Front access
Listed to UL924 and UL1778
Hybrid Fast Transfer Green Mode
- 98% Efficiency (Typical)
Online Continuous Mode
- 94% Efficiency (Typical)



Wave RiderTM 4

10-500 KVA (8 to 400 KW)

Key Features:

- Automatic monthly and annual self-testing
- Multiple design configurations
- True Galvanic isolation design
- Designed to protect against a floating neutral
- Advanced digital signal processing
- Modular design for ease of troubleshooting and maintenance
- Redundant Multi-CPU design allows the software and hardware to work together as a team
- The most intelligent and safe battery test circuitry available today
- Individualized inverter support on each phase
- Intelligent, fully temperature compensated battery charger
- Hi-Tech fan speed control
- Optimum design for heat dissipation
- Battery power start feature
- 2 Year Warranty* (optional)

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

Wave Rider 4 is an advanced inverter engineered for robust and reliable power supply in critical environments. This cutting-edge system offers automatic self-testing, true galvanic isolation, and redundant multi-CPU design, ensuring uninterrupted performance. With intelligent battery management and optimal heat dissipation, it's the ideal choice for critical power applications.

A selection of optional accessories to meet your particular needs are available:

- 3-Phase PC monitoring software
- Battery Sentinel (Battery Monitoring)
- 3-Phase SNMP card
- Input Harmonic Filter – reduces T.H.D. (Total Harmonic Distortion) of the input current
- Customizable backup time of 120 minutes or more
- 12 Pulse up to 60 kVA to reduce Harmonic in the input side for facility
- Thermal Runaway Control (IFC 1206.2)

Wave Rider™ 4 Specifications

Power Rating:

8, 16, 24, 32, 40, 48, 64, 80, 96, 128, 160, 192, 240, 320 and 400kW

Input Voltage:

208Y/120V or 480Y/277 VAC
(-15% to +15%)

Output Voltage:

208Y/120V or 480Y/277 VAC

Output Frequency (Inverter Operation):

60Hz ± 7Hz

Voltage Regulation:

±1% at 100% unbalanced load

Output Voltage Wave Form:

Sinusoidal < 2% THD.

Crest Factor: 3:1 Typical

Surge Protection:

The UPS will protect itself and the load against surges as defined in ANSI/IEEE C62.41 Categories A and B.

Isolation: True galvanic isolated

Battery: Sealed, Maintenance-Free, VRLA Standard 10 Year

Recharge Time: Varies per KVA and conforms to UL924

Environmental:

Humidity: 0 - 90% (non-condensing)

Operating Temperature:

UPS: 0° to 40°C. (32° - 104°F)
Battery: 20° to 25°C. (68° - 77°F)
Higher temperature batteries are available for special order.

Storage Temperature:

-20° to 70°C. (-4° - 158°F)
Electronics only.

Altitude: Up to 5,000 ft

Cabinet Sizes:

	(Width")	(Height")	(Depth")
8-48kW:	34"	63"	31.5"
64-128kW:	55.5"	63"	31.5"
300-400kW:	Consult Factory.		
Battery Cab:	51"	70"	30.5"

Standard Features

- Independent Phase Control Circuitry:
 - Phase Imbalance Tolerant.
 - Will operate completely unbalanced.
- Field Selectable Modes:
 - Online Double Conversion
 - Green Mode / Fast Transfer
- Pulse Width Modulation Rectifier:
 - 06-pulse (24kW to 64kW).
 - 12-pulse (80kW and above).
- Main Input/Output Circuit Breakers.
- Internal Maintenance Bypass.
- Transient Voltage Surge Suppression (TVSS).
- LCD Display for Viewing Unit Status and Events.
- Modular Design for Ease of Service.
- Multiple CPU Design:
 - Individual CPUs for Control Circuit Functions.
 - Parallel Redundancy for Critical Circuits.
- Intelligent Charger w/ Temperature Compensation.
- Redundant Power Supply.
- Integral Protection Against Operator Error.
- Power Conditioning Using PWM Methodology.
- Output Isolation Transformer for True Galvanic Isolation on the Load Side of the Inverter.
- Cold Start Function:
 - Power Up the Unit Using Its Batteries.

Options

- 8 Terminals of Dry Contacts Are Available: INVON, OVL, FAULT, SS BYPASS, BACKUP, BATL, COM
- Dry Contacts Normally Open*
- Dry Contact Normally Closed*
 - * Must select either Normally Open or Normally Closed not both.
- Integral Auxiliary Output Circuit Breakers (Consult Factory)
- Delta Input/Output
- RS-232 / RS-485 Connectors for External Modules:
 - Remote Status Panel UPSCAN™
 - Software for PC Monitoring UPSCOM™
 - Auto Dialing Module UPSCALL™
 - Battery Monitoring Module DCMAN™
- Event Logging up to 500 Events
- Battery Cabinet Exhaust Fan
- Battery Cabinet Exhaust Fan Dry Contact
- External Wrap Around Bypass**
- WiFi Monitoring (GMS)
- Wireless Battery Monitoring System: (Monitors Battery Health, Including Impedance)
 - String Monitoring
 - Individual Battery Monitoring
- Thermal Runaway Control (IFC 1206.2)

Consult Factory for more features and choices of remote communication.
** Not Compatible with Integral Auxiliary Output Circuit Breakers.

KVA/ KW	INPUT - OUTPUT VOLTAGES	MODEL NUMBERS	DC Voltages	WEIGHTS (LBS) CABINETS	
				UPS	EACH BATTERY (#) OF CAB.
10/8	208/120 - 208/120 480/277 - 480/277	WR010B05ATT3 WR010H09ATT3	348	840 840	2430 (1)
20/16	208/120 - 208/120 480/277 - 480/277	WR020B05ATT3 WR020H09ATT3	348	1083 1083	3213 (1)
30/24	208/120 - 208/120 480/277 - 480/277	WR030B05ATT3 WR030H09ATT3	348	1260 1260	4361 (1)
40/32	208/120 - 208/120 480/277 - 480/277	WR040B05ATT3 WR040H09ATT3	348	1414 1414	3213 (2)
50/40	208/120 - 208/120 480/277 - 480/277	WR050B05ATT3 WR050H09ATT3	348	1525 1525	3427 (2)
60/48	208/120 - 208/120 480/277 - 480/277	WR060B05ATT3 WR060H09ATT3	348	1724 1724	3817 (2)
80/64	208/120 - 208/120 480/277 - 480/277	WR080B05ATT3 WR080H09ATT3	348	2276 2276	4565 (2)
100/80	208/120 - 208/120 480/277 - 480/277	WR100B05ATT3 WR100H09ATT3	348	2984 2984	4900 (3)
120/96	208/120 - 208/120 480/277 - 480/277	WR120B05ATT3 WR120H09ATT3	348	3138 3138	4900 (4)
160/128	208/120 - 208/120 480/277 - 480/277	WR160B05ATT3 WR160H09ATT3	348	3868 3868	5000 (4)
200/160	208/120 - 208/120 480/277 - 480/277	WR200B05ATT3 WR200H09ATT3	348	5746 5746	5000 (5)
*240/192	208/120 - 208/120 480/277 - 480/277	WR240B05ATT3 WR240H09ATT3	348	6229 6229	**
*300/240	208/120 - 208/120 480/277 - 480/277	WR300B05ATT3 WR300H09ATT3	348	7293 7293	**
*400/320	208/120 - 208/120 480/277 - 480/277	WR400B05ATT3 WR400H09ATT3	348	9061 9061	**
*500/400	208/120 - 208/120 480/277 - 480/277	WR500B05ATT3 WR500H09ATT3	348	10166 10166	**

