

Three Phase Uninterruptible Power Supply

The Wave Rider IV is the ultimate UPS solution – providing uninterrupted power and protection against noise, lightning, and leakage current.

KEY FEATURES:

- **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**
- **A selection of optional accessories to meet your particular needs are available**
 - Remote control panel (UPS only)
 - 3-Phase PC monitoring software
 - Battery monitoring module
 - 3-Phase SNMP card
 - Input harmonic filter – reduces T.H.D. (Total Harmonic Distortion) of the input current



Wave Rider™ IV-HYBRID

Three Phase, 8 to 400 kW

208Y/120 or 480Y/277 VAC

Modular Design, Front Access

Listed to UL1778 and UL924

Hybrid Green Mode - 98% Efficiency

Online Continuous Mode - 94% Efficiency



Applications

Computer Room, Production Facility, Testing Lab, Telecommunications, Industrial, Government Buildings, Public Building, Schools, Healthcare, Cruise & Cargo Ship, Banking, Printing Facility

A Full Line Power Protection Company.

Wave Rider IV

SPECIFICATIONS

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

Input Voltage:

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

Output Voltages:

208Y/120V or 480Y/277VAC

Output Frequency (Inverter Operation): 60 Hz \pm 1 Hz

Voltage Regulation: \pm 1% at 100% unbalanced load

Output Voltage Wave Form: Sine-Wave <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 or Long Life Battery (available upon request)

Recharge Time: Varies per KVA and conforms to UL924.

Environmental:

Humidity: 0 - 90% (non-cond.)

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 60°C. (-4° - 140°F) electronics only.

Altitude: Up to 5,000 ft

Cabinet Size (UPS only)

(Width" x Height" x Depth"):

8-40kW: 22" x 63" x 31.5"

60-128kW: 44" x 63" x 31.5"

160-240kW: 86.5" x 63" x 31.5"D

320kW: 133" x 71" x 39.5"

400kW: 178" x 71" x 39.5"

KW	Input - Output Voltages	MODEL NUMBERS	Max. Battery (AMP)	BTU/ Hr	**Weights (lbs)	
					UPS	Each Battery Cab (#) of cab
8	208/120 - 208/120 480/277 - 480/277	WR010B05ATT3 WR010H09ATT3	348	2218 2218	840 840	2187 (1)
16	208/120 - 208/120 480/277 - 480/277	WR020B05ATT3 WR020H09ATT3	348	11942 11942	1083 1083	4014 (1)
24	208/120 - 208/120 480/277 - 480/277	WR030B05ATT3 WR030H09ATT3	348	11942 11942	1260 1260	4594 (1)
32	208/120 - 208/120 480/277 - 480/277	WR040B05ATT3 WR040H09ATT3	348	11942 11942	1414 1414	3536 (2)
40	208/120 - 208/120 480/277 - 480/277	WR050B05ATT3 WR050H09ATT3	348	11942 11942	1525 1525	3536 (2)
48	208/120 - 208/120 480/277 - 480/277	WR060B05ATT3 WR060H09ATT3	348	11942 11942	1724 1724	4594 (2)
64	208/120 - 208/120 480/277 - 480/277	WR080B05ATT3 WR080H09ATT3	348	15695 15695	2276 2276	3888 (3)
80	208/120 - 208/120 480/277 - 480/277	WR100B05ATT3 WR100H09ATT3	348	18425 18425	2984 2984	3231 (4)
96	208/120 - 208/120 480/277 - 480/277	WR120B05ATT3 WR120H09ATT3	348	22178 22178	3138 3138	14420 (3)
128	208/120 - 208/120 480/277 - 480/277	WR160B05ATT3 WR160H09ATT3	348	29684 29684	3868 3868	14130 (3)
160	208/120 - 208/120 480/277 - 480/277	WR200B05ATT3 WR200H09ATT3	348	39238 39238	5746 5746	18840 (3)
* 192	208/120 - 208/120 480/277 - 480/277	WR240B05ATT3 WR240H09ATT3	348	44356 44356	6229 6229	**
* 240	208/120 - 208/120 480/277 - 480/277	WR300B05ATT3 WR300H09ATT3	348	55616 55616	7293 7293	**
* 320	208/120 - 208/120 480/277 - 480/277	WR400B05ATT3 WR400H09ATT3	348	78476 78476	9061 9061	**
* 400	208/120 - 208/120 480/277 - 480/277	WR500B05ATT3 WR500H09ATT3	348	98948 98948	10166 10166	**

* Units are available only upon request.

** Consult Factory.

STANDARD FEATURES

- 6 pulse or 12 pulse controlled rectifier (12 pulse for 80 kVA & up)
- Input main circuit breakers
- Data and events LCD display
- Built-in Transient Voltage Surge Suppressor
- EMI suppression
- PWM methodology (DSP)
- Isolation transformer at output for True galvanic isolation
- Internal Maintenance Bypass Breakers
- Integral Auxillary Output Circuit Breakers (consult factory)
- Modular design to facilitate ease and speed of service
- Cold start function: UPS can be started with battery power only without an AC source
- Multi-CPU design: Several CPUs are employed in control circuit and critical functions are designed with parallel redundancy for added reliability
- Protection against misuse: circuit breaker on/off sensor, and power supply sensor; the user cannot cause UPS damage by operator error.
- Intelligent charger: UPS will automatically recharge with temperature compensation.
- Intelligent battery test
- Redundant power supply
- DB9 Connection- (4) RS-485 & (1) RS-232:

The following are some connection examples of optional modules

- CNR21 (RS-232): UPSCOM- Software for PC Monitoring, SNMP card
- CNR9 (RS-485): DCMAN- Battery Monitoring Module
- CNR10 (RS-485): UPSCAN- Remote Control Panel
- CNR12,13,14,15,17,18,19 (RS-485): UPSCALL- Auto Dialing Module
- CNR11: for transferring RS-485 into RS-232

OPTIONS

- RS-232 / RS-485 for varies accessory
- 8 Dry contacts: INVON,OVL,FAULT, SS, BYPASS, BACK-UP, BATL, COM.
- Remote control panel UPSCAN™
- Software for PC monitoring UPSCAN™
- Auto dialing module UPSCAN™
- Battery Monitoring module DCMAN™
- Output Aux CB's
- Main Output Breaker
- WIFI Monitoring (GMS)

Consult Factory for more features and choices of remote communication.



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