

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:

- 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
- 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 Fast Transfer 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 ±1 Hz

Voltage Regulation: ±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"):

8-48kW: 34" x 63" x 31.5"

64-128kW: 55.5" x 63" x 31.5"

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

320kW: 133" x 71" x 39.5"

400kW: 178" x 71" x 39.5"

Battery Cab: 51" x 70" x 30.5"

| KW | Input - Output Voltages | MODEL NUMBERS | DC Voltages | **Weights (lbs) | |
|-------|--|------------------------------|-------------|-----------------|-----------------------------|
| | | | | UPS | Each Battery Cab (#) of cab |
| 8 | 208/120 - 208/120 480/277 - 480/277 | WR010B05ATT3 WR010H09ATT3 | 348 | 840 840 | 2187 (1) |
| 16 | 208/120 - 208/120 480/277 - 480/277 | WR020B05ATT3 WR020H09ATT3 | 348 | 1083 1083 | 4014 (1) |
| 24 | 208/120 - 208/120 480/277 - 480/277 | WR030B05ATT3 WR030H09ATT3 | 348 | 1260 1260 | 4594 (1) |
| 32 | 208/120 - 208/120 480/277 - 480/277 | WR040B05ATT3 WR040H09ATT3 | 348 | 1414 1414 | 3536 (2) |
| 40 | 208/120 - 208/120 480/277 - 480/277 | WR050B05ATT3 WR050H09ATT3 | 348 | 1525 1525 | 3536 (2) |
| 48 | 208/120 - 208/120 480/277 - 480/277 | WR060B05ATT3 WR060H09ATT3 | 348 | 1724 1724 | 4594 (2) |
| 64 | 208/120 - 208/120 480/277 - 480/277 | WR080B05ATT3 WR080H09ATT3 | 348 | 2276 2276 | 3888 (3) |
| 80 | 208/120 - 208/120 480/277 - 480/277 | WR100B05ATT3 WR100H09ATT3 | 348 | 2984 2984 | 3231 (3) |
| 96 | 208/120 - 208/120 480/277 - 480/277 | WR120B05ATT3 WR120H09ATT3 | 348 | 3138 3138 | 14420 (4) |
| 128 | 208/120 - 208/120 480/277 - 480/277 | WR160B05ATT3 WR160H09ATT3 | 348 | 3868 3868 | 14130 (4) |
| 160 | 208/120 - 208/120 480/277 - 480/277 | WR200B05ATT3 WR200H09ATT3 | 348 | 5746 5746 | 18840 (5) |
| * 192 | 208/120 - 208/120 480/277 - 480/277 | WR240B05ATT3 WR240H09ATT3 | 348 | 6229 6229 | ** |
| * 240 | 208/120 - 208/120 480/277 - 480/277 | WR300B05ATT3 WR300H09ATT3 | 348 | 7293 7293 | ** |
| * 320 | 208/120 - 208/120 480/277 - 480/277 | WR400B05ATT3 WR400H09ATT3 | 348 | 9061 9061 | ** |
| * 400 | 208/120 - 208/120 480/277 - 480/277 | WR500B05ATT3 WR500H09ATT3 | 348 | 10166 10166 | ** |

* Units are available only upon request.

** Consult Factory.

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Specifications are subject to change without prior notification.

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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