

# POWER RIDE 1

## Single Phase, 2.1 to 17kW

office buildings • factories • warehouses  
hospitals • hotels • motels • schools • universities  
shopping centers • airports • casinos • supermarkets  
military installations • apartment buildings  
train and bus terminals • houses of worship

**EMERGENCY  
LIGHTING  
INVERTERS**

HID, Incandescent, Fluorescent, LED  
120, 208, 240, 277, or 480 Volts  
Listed to UL924 and UL1778 Standards

### STANDARD FEATURES

- ◆ Back-lit LCD Display for monitoring
- ◆ System pre-wired for optional
- ◆ Global Monitoring System (GMS)
- ◆ Battery Breaker
- ◆ Inverter Test Switch
- ◆ Generator Compatible with Automatic Governor (Slew Rate 0.2Hz/sec.)
- ◆ Battery Management Software
- ◆ High Frequency PWM with Digital Signal Processing Technology
- ◆ Built-in Input Power Factor Correction



### POWER RIDE 1

**ON-LINE //  
STAND-BY /FAST TRANSFER**

*Electronic Cabinet*

The PowerRide I 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.

### KEY FEATURES:

- ◆ Fast Transfer, Standby, and Double Conversion "no-break" online system are available
- ◆ Efficiency: 94% Online / 98% Standby / Fast Transfer
- ◆ Automatic monthly and annual self-testing
- ◆ Latest technology microprocessor controlled electronics with PWM (Pulse Width Modulated) design for true Sine Wave output
- ◆ Continuous self-diagnostic and self-testing system
- ◆ LCD backlit panel for comprehensive monitoring of power line conditions and inverter status
- ◆ Sealed maintenance-free lead calcium batteries with 10 year prorated warranty
- ◆ Battery Exerciser
- ◆ Single Cabinet design for ease of installation convenient front access
- ◆ 2 Year Warranty\*

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

# TECHNICAL SPECIFICATIONS

## POWER RIDE 1

EMERGENCY  
LIGHTING  
INVERTERS

**Power Rating:** 2.1, 3, 3.5, 5, 6, 8, 10, 12.5, 15 & 17 kW

**Input Voltage:** 2.1 - 5KW, 6KW; 120, 208, 240, 277, or 480 VAC (-15% to +10%)

8 - 17KW; 208, 240, 277, or 480 VAC (-15% to +10%)

**Output Voltage:** 120, 208, 240, 277, or 480 VAC. 120/240; 120/208; 120/277; 480 & 277

**Output Frequency (Inverter Operation):** 60Hz +0.5Hz.

**Voltage Regulation:** +3% Typical

**Output Voltage Wave Form:** Sine-wave.

**Optional Input Protection:** Input Circuit Breaker provided protection to the unit, load, and personnel and is rated at (10 KAIC) standard, higher interruption up to 65 (KAIC) optional.

**Output Protection:** Internal Electronic overload protection. Circuit breaker provides inherent over-load protection. Factory selectable voltage 120, 208, 240, 277, or 480 for input or output voltages. If input is different from output or output different from input, an internally mounted transformer is required.

**Surge Protection:** The inverter will protect itself and the load against surge as defined in ANSI/IEEE C62.45 category A and B.

**Noise Isolation:** -120 dB. Common-Mode., 60 dB. Transverse-Mode

**Isolation:** Output is completely isolated from input and with multi voltages

**Efficiency:** 98% standby - fast transfer / 94% online

**Power Factor:** Unity

**Crest Factor:** 3:1

**Battery:** Sealed, Maintenance-free, Lead-Acid, VRLA (Standard) 10 years

**Battery Management System:** Utilizes a microprocessor technology to monitor the batteries critical levels and apply charging cycles in a method to substantially increase battery life.

**Housing:** Free standing NEMA 1 Enclosure powder coated paint Front access only Multiple conduit entries. Refer to chart for dimensions.

**Recharge Time:** Conforms to UL924

**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 70°C. (-4° - 158°F)

**Safety Agencies:** CSA Listed to UL 924, UL 924A, UL1778

KW	INPUT - OUTPUT VOLTAGES	MODEL NUMBERS	DC Voltages	CABINET SIZE	WEIGHT (LBS)
2.1	120/120 280/280 240/240 277/277 X / 208, 277, 120/240 Y / 277 & 480	PD2.1A0100N1 PD2.1B1300N1 PD2.1D0400N1 PD2.1R2500N1 PD2.1H2500N1 PD2.1X5800T1 PD2.1Y5899T1	96	39"W x 68"H x 18"D 48" H Optional	896 lbs
3.0	120/120 280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD3.0A0100N1 PD3.0B1300N1 PD3.0D0400N1 PD3.0R2500N1 PD3.0H2500N1 PD3.0X5800T1 PD3.0Y5899T1	96	39"W x 68"H x 18"D 48" Optional	1066 lbs
5.0	120/120 280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD5.0A0100N1 PD5.0B1300N1 PD5.0D0400N1 PD5.0R2500N1 PD5.0H2500N1 PD5.0X5800T1 PD5.0Y5899T1	120	39"W x 68"H x 18"D	1284 lbs
6.0	120/120 280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD6.0A0100N1 PD6.0B1300N1 PD6.0D0400N1 PD6.0R2500N1 PD6.0H2500N1 PD6.0X5800T1 PD6.0Y5899T1	144	39"W x 68"H x 18"D	1284 lbs
8.0	280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD8.0B1300N1 PD8.0D0400N1 PD8.0R2500N1 PD8.0H2500N1 PD8.0X5800T1 PD8.0Y5899T1	192	39"W x 68"H x 18"D	1464 lbs
10	280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD010B1300N1 PD010D0400N1 PD010R2500N1 PD010H2500N1 PD010X5800T1 PD010Y5899T1	192	51"W x 70"H x 30.5"D	2870 lbs
12.5	280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD012B1300N1 PD012D0400N1 PD012R2500N1 PD012H2500N1 PD012X5800T1 PD012Y5899T1	192	51"W x 70"H x 30.5"D	3777 lbs
15.0	280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD015B1300N1 PD015D0400N1 PD015R2500N1 PD015H2500N1 PD015X5800T1 PD015Y5899T1	240	51"W x 70"H x 30.5"D	4512 lbs
17.0	280/280 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	PD017B1300N1 PD017D0400N1 PD017R2500N1 PD017H2500N1 PD017X5800T1 PD017Y5899T1	240	51"W x 70"H x 30.5"D	4512 lbs

\* Input Voltage "X": A= 120, B= 208, D= 240, R= 277, H= 480 VAC

\* Input Voltage "Y": R= 277 or H= 480 VAC

\* Output Voltage "5800" = 120/240, or 280, or 277 VAC

\* Output Voltage "5899" = 277 & 480 VAC

All units are 90 minutes battery back-up time at full load.

For other back-up times (up to 6 hours), consult factory.

Consult factory for 120V and other voltages.

## OPTIONS

- Secondary Auxiliary Circuit Breakers (up to 16 or 24 onepole OCB's): Normally On, Normally Off, Normally Off w/ Delay, Trip Alarm
- Dry Contact Normally Open
- Dry Contact Normally Open and/or Closed
- Remote Status Panel Unit with Audio Alarm and Silence Switch
- Local Audio Alarm with Silence Switch
- Make Before Break Internal Maintenance Bypass Switch
- External Maintenance Bypass Switch (wrap around type)
- Main Input and/or Output Circuit Breaker (with custom KAIC)
- Input Transient Voltage Surge Suppressor (TVSS)
- Battery Thermal Runaway
- Certified Zone 4 Seismic Bracket: Adds approx. 4" of additional floor space to each side of cabinet
- Extended Warranty and Service Plans
- Long Life Battery: Check with factory for number of cabinets
- Battery Monitoring System
- Event logging Monitoring via RS232 and RS485
- Monitoring via RS232 and RS485

## Optional Global Monitoring System (GMS)

- Provide SNMP MIB to monitor & log UPS status
- Auto-sense 10M/100M Fast Ethernet
- Manage & configure via Telnet, Web Browser or NMS
- Support TCP/IP, UDP, SNMP, TelNet, SNTP, PPP, HTTP, SMTP Protocol
- Sending both of SNMP TRAP and Email for events notifications.
- Auto email daily Battery Backup history report (configurable)
- Basic NetAgent: LAN or WIFI
- Advance NetAgent: LAN, WIFI, Dial-up Modem, or GPRS Modem

Consult factory for more features and choices of remote communication. Specifications are subject to change without prior notification.



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