

# EMERGENCY LIGHTING INVERTER

Three Phase, 90 minutes Battery Backup Time @ full load



## Power Wave 3

10 kVA to 50 kW, Three Phase

### Emergency Lighting Approved

UL 924 with 90 minutes of sealed maintenance-free AGM batteries to power emergency lighting circuits, the Power Wave will keep egress path illuminated.

### State of Art Technology

High Frequency PWM double conversion use Digital Signal Processing for control, measurement to protect the load. The Power Wave is always on-line, eliminating noise, spikes, sags, and brownouts. Should utility power fail, the inverter provides uninterrupted output power to the critical load. This high frequency unit is listed to ULI778 and 924 by CSA.

### Display (local and remote)

The Power Wave provides one of the most comprehensive monitoring packages. Its 4 line X 20 character backlit LCD panel continuously display and monitor vital power line conditions and status of the unit.

### Global Monitoring System (GMS)

The Power Wave can communicate with computers, and serial devices via its local RS232/RS485 ports standard on every model making Power Wave compatible with today's most popular devices. Optional dry contacts are also available for remote monitoring and annunciation. GMS options includes dial-up modem, fax, alpha pager, beeper, email, and internet web page for monitoring or retrieving event logs and system status information.

### Alarms

The Power Wave offers local alarm and optional remote display with sound alert (including unit status). It also offers most extensive method of remote alarm notification via pager, email, fax, voice annunciation and website. The system can advise multiple recipients.

### Small Footprint Cabinet

The Power Wave requires less floorspace than most other UPS systems and Stackable Cabinet Rack are available as an option for more space savings. Its compact, lightweight design saves overall space, facilitates handling, and keeps shipping costs to a minimum.

### Sine-Wave Power 21st Century

The Power Wave delivers computer-grade, sine-wave power; the preferred power source for all electronic equipment.

### Isolation, Including Output Neutral To Ground Bonding

The Power Wave provides the galvanic electrical isolation required by FIPS PUB 94 (Federal Information Processing Standard) and it qualifies as a true, separately derived power source as defined by the National Electrical Code, Article 250-5d. This isolation allows the Power Wave to offer excellent RF noise filtering and single point grounding for sensitive electronic equipment (standard on all models with different input/output voltages). Optional harmonic tolerant transformer (up to K-50) for today's switching equipment is available.

### Distribution (optional)

Normally On and OFF Output breakers are available with optional trip alarm as well as customer selectable time delay.

### Safeguard™ Battery Management System

OnLine Power has designed (patent pending) a process for the real time ability to charge and monitor the battery system. This system utilizes a microprocessor technology to monitor the batteries critical levels and apply charging cycles in a method substantially increasing battery life.

Listed to  
ULI778 and UL924 by  
CSA

Power Factor and Energy  
Efficient Ballast

LCD Panel for Monitoring

Global Monitoring System  
(GMS)

90% Efficiency (typ.)

Battery Exerciser

Pulse Width Modulated  
(PWM) Double  
Conversion Technology

Sinusoidal Waveform

Modular Assembly for  
Ease of Installation

Generator Compatible  
with Automatic Governor  
max 2Hz per second

Small Foot Print Cabinet  
and Seismic Bracket



Incandescent, Fluorescent, HID, HPS, Power factor and energy efficient Ballast Compatible  
Computer Room • Production Facility • Testing Lab • Telecommunications • Retail Sales / POS • Industrial  
Government • Public Building • Schools • Healthcare • Cruise Line • Banking / Credit • Printing Facility

# Power Wave 3 Specifications

## Power Rating:

10 to 50 KVA, 8 to 50 KW

## Input Voltage: 208Y/120 or 480Y/277

VAC (-20% to +15%)

## Output Voltages: 208Y/120 or 480Y/277 VAC

## Output Frequency (Inverter Operation): 60 Hz ±0.5 Hz

## Voltage Regulation:

±3% typical, Regulated within CBEMA curve

## Output Wave Form: Sine-Wave < 5% THD.

## Efficiency: 90% typical

## 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: Complete from line. Output neutral bonded to ground

## Noise Isolation:

-120 dB Common-Mode;  
-60 dB Transverse-Mode

## Battery: Sealed, maintenance-free (AGM) battery

## Recharge Current:

Conforms to UL Standards

## External Battery:

Provisions for hardwire connection of optional external battery cabinets or DC source.

## Environmental:

### Humidity:

0 - 95% RH w/ no condensation

### Operating Temperature:

UPS: 0° to 40°C. (32 -104°F)  
Battery: 20° to 30°C. (68°-86°F)

### Storage Temperature:

-20° to 60°C. (-4°-140°F)

### Altitude: Up to 10,000 ft

## Safety Agencies:

Listed to ULI778 UPS,UL924, Lighting Standard, by CSA

## Inverter Cabinet Sizes:

39" Wide x 18" Deep x 68" High

## Battery Cabinet Sizes:

39" W x 18" D x 68" H  
51" W x 30.5" D x 68" H

## STANDARD FEATURES

- On-Line Central Lighting Inverter
- Back-lit LCD Display for monitoring
- RS 232 & RS 485 ports for metering, measuring and diagnostic.
- System pre-wired for optional Global Monitoring System (GMS)
- High Frequency PWM with Digital Signal Processing Technology
- Input and Output Circuit Breaker
- Generator Compatible with Automatic Governor (Slew Rate 2Hz/sec.)
- Inverter Test Switch
- Battery Breaker
- Make Before Break Internal Maint. Bypass Switch
- TVSS

## OPTIONS

- Secondary Auxiliary Circuit Breakers: Normally On, Normally Off, Normally Off w/ Delay, Trip Alarm
- Form 'C' Contacts (5), (N.O.)
- Secondary Normally On/Off Terminal Block selection
- Remote Status Panel Unit with Audio Alarm and Silence Switch
- Local Audio Alarm with Silence Switch
- Input Current Harmonic Filter, 10% & 5% (This option will not be offer with Secondary Auxiliary Circuit Breakers)
- Make Before Break External Maintenance Bypass Switch
- Main Input and/or Output Circuit Breaker (with custom KAIC)
- Built-in Secondary Distribution
- External Attachable Panelboard (30-42 poles)
- EMI Filter
- Harmonic Tolerance (up to K-50)
- Stackable Cabinet Rack to save floor space
- Seismic Bracket
- Extended Warranty and Service Plans
- Spare Part Kits Available
- Long Life Battery
- **Global Monitoring System (GMS)**

### LOCAL

- Local PC via RS232 and RS485
- Event logging up to 500

### REMOTE

- **Dial-up**
  - Voice (10 event logging), numeric pager
  - Voice, data, fax, pager, PC, e-mail, event logging up to 500
  - Voice, data, fax, pager, PC, e-mail, and measurement (500 event logging plus graphic)
- **Web/SNMP:** LAN or WIFI  
System status, measurement, alarm notification, event logging and password protected configuration.

Consult Factory for more features and choices of remote communication.

KVA/ KW	INPUT - OUTPUT	KVA Model Number	DC Volts	BTU/ Hr	Total Weights (lbs)	
					Inverter Cab.	(Qty) Battery Cab.
10/8	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW010B05LHT3-VA PW010H09LHT3-VA PW010H05LHT3-VA	192	3032	(1 Cabinet) 1083 lbs	39w x 18d x 68h (1 Cabinets) 1392 lbs
15/12	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW015B05LHT3-VA PW015H09LHT3-VA PW015H05LHT3-VA	192	4549	(1 Cabinet) 1446 lbs	51W x 30.5D x 68H (1 Cabinets) 3224 lbs
20/16	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW020B05LHT3-VA PW020H09LHT3-VA PW020H05LHT3-VA	192	6066	(1 Cabinet) 1679 lbs	51W x 30.5D x 68H (1 Cabinets) 3560 lbs
25/20	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW025B05LHT3-VA PW025H09LHT3-VA PW025H05LHT3-VA	288	7582	(1 Cabinet) 1679 lbs	51W x 30.5D x 68H (1 Cabinets) 4545 lbs
30/24	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW030B05LHT3-VA PW030H09LHT3-VA PW030H05LHT3-VA	288	9098	(1 Cabinet) 1719 lbs	51W x 30.5D x 68H (1 Cabinets) 4568 lbs
40/32	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW040B05LHT3-VA PW040H09LHT3-VA PW040H05LHT3-VA	312	12131	(1 Cabinet) 2066 lbs	51W x 30.5D x 68H (2 Cabinets) 8664 lbs
50/40	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW050B05LHT3-VA PW050H09LHT3-VA PW050H05LHT3-VA	552	15164	(1 Cabinet) 2463 lbs	51W x 30.5D x 68H (2 Cabinets) 8800 lbs
50kW	208Y/120 - 208Y/120 480Y/277 - 480Y/277 480Y/277 - 208Y/120	PW062B05LHT3-VA PW062H09LHT3-VA PW062H05LHT3-VA	552	18000	(1 Cabinet) 2565 lbs	51W x 30.5D x 68H (3 Cabinets) 12700 lbs

\* For optional cabinet size and battery type - consult factory.

Standard Battery Back-up time is 90 minutes @ full load.

Longer Battery Back-up times available, consult factory.

Specifications are subject to change without prior notification.

