

EMERGENCY LIGHTING INVERTER

Single Phase, 90 minutes Battery Backup Time @ full load



New Single Cabinet Design

Power Wave I

2.1 to 17 kW, Single Phase

Emergency Lighting Approved

UL 924 with 90 minutes of sealed lead calcium 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 UL1778, 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.

Input Power Factor Correction

The Power Wave pays for itself by correcting input current draw to reduce your utility bill without compromising power quality.

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.

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. 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
UL1778 and UL924 by
CSA

Built-in Input Power
Factor Correction

Modular Assembly for
Ease of Installation

LCD Panel for Monitoring
Global Monitoring System
(GMS)

94% Efficiency (typ.)

Pulse Width Modulated
(PWM)

Generator Compatible
with
Automatic Governor
max 2Hz per second

Transformerless
Technology (Same
Input/Output voltage
only)

Double Conversion
Technology

Battery Exerciser

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 I Specifications

Power Rating: 2.1 to 17 KW

Input Voltage:

2.1 - 5 KW, 6 KW, 8 KW; 120, 208, 240, 277, or 480 VAC (-20% to +15%)

5.25, 7, 7.5, 8.75 - 17 KW; 208, 240, 277, or 480 VAC (-15% to +15%)

Input Frequency: Slew rate of 2Hz/sec

Output Voltages: 120, 208, 240, 277, or 480 VAC

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

Voltage Regulation: ±3%

Output Wave Form: Sine-Wave

Optional Input Protection: Input circuit breaker provided protection to the unit, load and personnel. Input Circuit Breaker will be higher interruption rated (10, 42, and 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.

Output Power Factor: 1.0 unity

Efficiency: 94% typical

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 (Optional Long Life Battery)

Recharge Time: Conforms to UL Standard

External Battery: Provisions for hard-wire connection of optional external battery cabinets or DC source.

Environmental:

Humidity: 0 - 95% RH w/ no condensation

Operating Temperature:

UPS: 0° - 40°C. (32° - 104°F)
Battery: 20° - 25°C. (68°-77°F)

Storage Temperature: -20° to 60°C. (-4° - 140°F) electronics only.

Altitude: Up to 10,000 ft

Safety Agencies:

Listed to ULI778 and UL924 by CSA

Cabinet Size: Wide" x High x Deep

2.1-3.0 KW: 39" x 48" x 18"

3.5-5, 6, 8 KW: 39" x 68" x 18"

5.25, 7, 7.5, 8.75-17 KW: 51" x 70" x 30.5"

All units are 90 minutes Battery Back-up time @ full Load. Consult factory for back-up times (up to 6 hours).

* Input Voltage "X": A=120 (2.1 & 5 KW only),
B=208, D=240, R=277, H=480 VAC

*Output Voltage "58": 120, 208, 240, 277, and 480 VAC

** Consult factory for 120V Input and other Power Ratings.

KVA/KW	MODEL NUMBERS	Input/Output Voltages	DC Volts	BTU /Hr	Wgts (lbs)
2.1	PW3.0A0100NI-VA	120/120	96	859	826
	PW3.0B1300NI-VA	208/208		859	826
	PW3.0D0400NI-VA	240/240		859	826
	PW3.0R2500NI-VA	277/277		859	826
	*PW3.0X5800TI-VA	120,208,240,277,480		1166	896
3.0	PW3.0A0100NI	120/120	96	1227	996
	PW3.0B1300NI	208/208		1227	996
	PW3.0D0400NI	240/240		1227	996
	PW3.0R2500NI	277/277		1227	996
	*PW3.0X5800TI	120,208,240,277,480		1433	1066
3.5	PW5.0A0100NI-VA	120/120	120	1223	1101
	PW5.0B1300NI-VA	208/208		1223	1101
	PW5.0D0400NI-VA	240/240		1223	1101
	PW5.0R2500NI-VA	277/277		1223	1101
	*PW5.0X5800TI-VA	120,208,240,277,480		1627	1171
5.0	PW5.0A0100NI	120/120	120	1875	1214
	PW5.0B1300NI	208/208		1875	1214
	PW5.0D0400NI	240/240		1875	1214
	PW5.0R2500NI	277/277		1875	1214
	*PW5.0X5800TI	120,208,240,277,480		2047	1284
**	5.25	PW7.5B1300NI-VA	208/208	1973	1506
PW7.5D0400NI-VA		240/240	1973	1506	
PW7.5R2500NI-VA		277/277	1973	1506	
*PW7.5X5800TI-VA		120,208,240,277,480	2150	1666	
6.0	PW6.0A0100NI	120/120	144	2630	1224
	PW6.0B1300NI	208/208		2416	1224
	PW6.0D0400NI	240/240		2416	1224
	PW6.0R2500NI	277/277		2416	1224
	*PW6.0X5800TI	120,208,240,277,480		2630	1284
**	7	PW010B1300NI-VA	208/208	2629	1867
PW010D0400NI-VA		240/240	2629	1867	
PW010R2500NI-VA		277/277	2629	1867	
*PW010X5800TI-VA		120,208,240,277,480	2866	2042	
**	7.5	PW7.5B1300NI	208/208	2819	2190
PW7.5D0400NI		240/240	2819	2190	
PW7.5R2500NI		277/277	2819	2190	
*PW7.5X5800TI		120,208,240,277,480	3070	2350	
8.0	PW8.0A0100NI	120/120	192	3278	1289
	PW8.0B1300NI	208/208		3004	1289
	PW8.0D0400NI	240/240		3004	1289
	PW8.0R2500NI	277/277		3004	1289
	*PW8.0X5800TI	120,208,240,277,480		3278	1464
**	8.75	PW012B1300NI-VA	208/208	3287	2352
PW012D0400NI-VA		240/240	3287	2352	
PW012R2500NI-VA		277/277	3287	2352	
*PW012X5800TI-VA		120,208,240,277,480	3583	2572	
**	10	PW010B1300NI	208/208	3755	2695
PW010D0400NI		240/240	3755	2695	
PW010R2500NI		277/277	3755	2695	
*PW010X5800TI		120,208,240,277,480	4094	2870	
**	10.5	PW015B1300NI-VA	208/208	3926	2792
PW015D0400NI-VA		240/240	3926	2792	
PW015R2500NI-VA		277/277	3926	2792	
*PW015X5800TI-VA		120,208,240,277,480	4299	3132	
**	12.5	PW012B1300NI	208/208	4696	3557
PW012D0400NI		240/240	4696	3557	
PW012R2500NI		277/277	4696	3557	
*PW012X5800TI		120,208,240,277,480	5118	3777	
**	14	PW020B1300NI-VA	208/208	5257	4172
PW020D0400NI-VA		240/240	5257	4172	
PW020R2500NI-VA		277/277	5257	4172	
*PW020X5800TI-VA		120,208,240,277,480	5732	4512	
**	15	PW015B1300NI	208/208	5608	4172
PW015D0400NI		240/240	5608	4172	
PW015R2500NI		277/277	5608	4172	
*PW015X5800TI		120,208,240,277,480	6141	4512	
**	17	PW017B1300NI	208/208	5608	4172
PW017D0400NI		240/240	5608	4172	
PW017R2500NI		277/277	5608	4172	
*PW017X5800TI		120,208,240,277,480	6141	4512	

STANDARD FEATURES

- 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)
- Battery Breaker
- Inverter Test Switch
- Generator Compatible with Automatic Governor (Slew Rate 2Hz/sec.)
- High Frequency PWM with Digital Signal Processing Technology
- Built-in Input Power Factor Correction

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
- Make Before Break Internal Maintenance Bypass Switch
- External Maintenance Bypass Switch (wrap around type)
- Main Input and/or Output Circuit Breaker (with custom KAIC)
- Built-in Secondary Distribution
- Input Transient Voltage Surge Suppressor (TVSS)
- Harmonic Tolerance (up to K-50)
- EMI Filter
- Certified Zone 4 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:** System status, measurement, alarm notification, event logging and password protected configuration.

Consult Factory for more features and choices of remote communication.

Specifications are subject to change without prior notification.

