



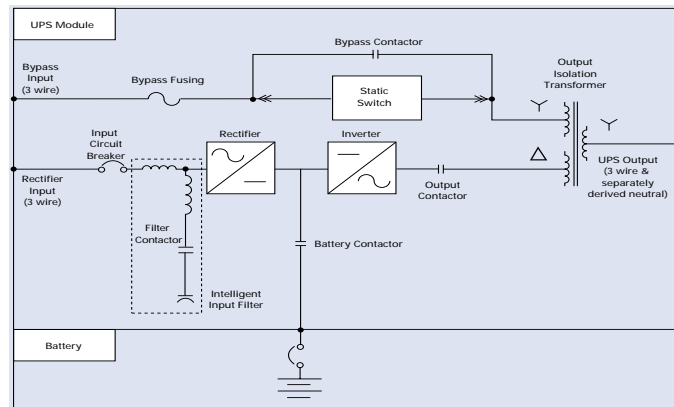
Model 50 50kVA/40kW

Model 65 65kVA/52kW

Model 80 80kVA/64kW

# Powerware® 9315-80

## One line Diagram



Note: Dual feed input not available for 208V or 220V input.

## Features

- ▶ DC Expert™ Battery Management System
  - ▶ +/- 3% Battery Run Time
  - ▶ Battery Health Indication
- ▶ Powerware Hot Sync® Redundant Capability
- ▶ Large display panel provides metering, statistics, alarm history and an active mimic bus
- ▶ Prioritized cooling of components
- ▶ System Monitoring:
  - ▶ PowerVision® network software
  - ▶ RS-232 port
  - ▶ SNMP conversion
  - ▶ Accessory port
  - ▶ Building alarm contacts
  - ▶ Intelligent input filter option

### Environmental Specifications

Ambient temperature: 0°C to +40°C  
 Storage: -20°C to +70°C  
 Relative humidity: 5-95% non-condensing  
 Altitude: 1500 meters (5000ft.) at 40°C ambient temperature without load derating  
 Audible noise: Less than 65 dBA at 1 meter; in accordance with ISO 7779  
 Electrostatic discharge: Withstands 25kV without damage or disturbance to the load; exceeds requirements of IEC 801-2  
 EMC: Meets FCC Class A and EN 50091-2 (CISPR 22, Class A)

### Input Specifications

Voltage range: (See chart on other side)  
 Frequency range: (60 Hz) 57-63 Hz; (50 Hz) 47-53 Hz  
 Surge protection: Meets ANSI C62.41, Category A & B, EN 50091-2 and EN 50082-2  
 Power factor: 0.95 typical at full load with input filter  
 Input current distortion less than 7% with input filter

Specifications subject to change without notice.

### Output Specifications

Voltage THD: Less than 5% (100% non-linear load with 3:1 crest factor); less than 3% (100% linear load)  
 Voltage regulation: Better than ±1%  
 Transient response: Less than 5% for 100% load step; full recovery within 1 cycle  
 Frequency: (free run) ±0.005 Hz  
 Frequency sync range: ±0.5 Hz  
 Frequency slew rate: 1 Hz/second maximum  
 Voltage adjustment range (operator): ±5%

### Battery Specifications

Matching cabinets – Line-up or remote  
 Battery type: Sealed, valve-regulated lead acid  
 Recharge time: 10-12 times the discharge time to 95%  
 Other battery options: Wet cell and nickel-cadmium batteries; open racks available  
*For battery run times and configurations, refer to Bulletin BAT01FXA.*

### Safety

UL1778 Listed  
 CUL CAN/CSA C22.2 NO.107.1-M91 Listed  
 EN 50091-1  
 All cabinets provide seismic mounting features  
 Selectable DC ground fault detection capability

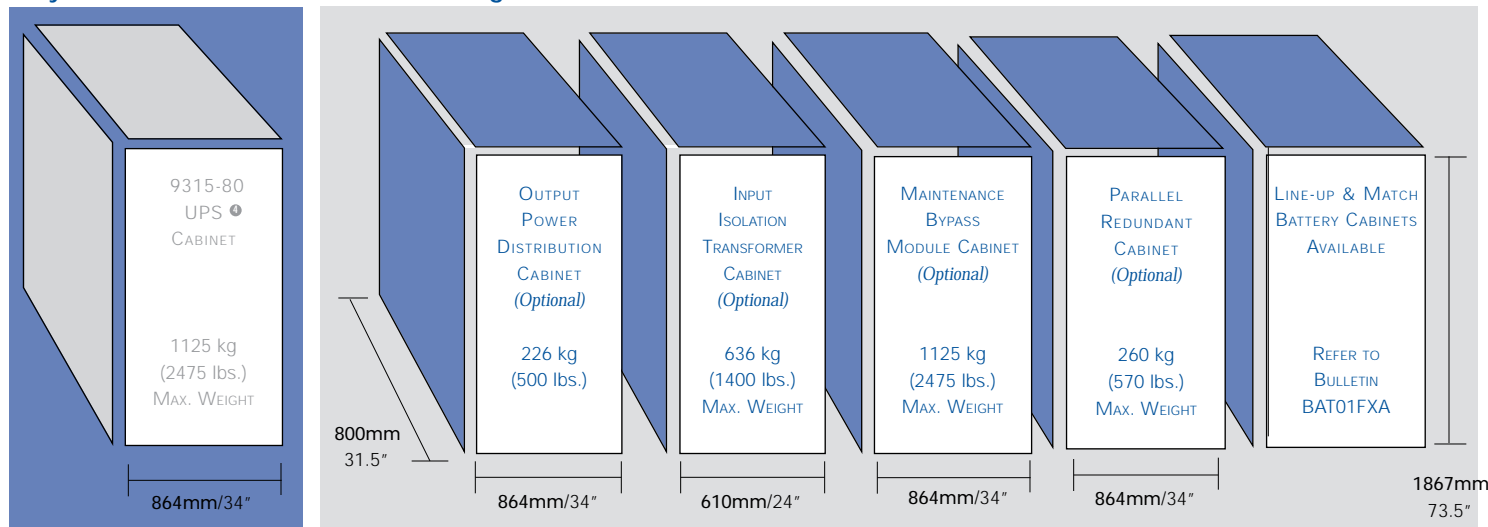
**Powerware 9315-80 Performance Characteristics**

		Model 50							Model 65							Model 80						
		50kVA/40kW							65kVA/52kW							80kVA/64kW						
Input Voltage	Volts	480	480	208	220	600	600	400 <sup>1</sup>	480	480	208	220	600	600	400 <sup>1</sup>	480	480	208	220	600	600	400 <sup>1</sup>
Output Voltage	Volts	208	480	208	208	600	208	400	208	480	208	208	600	208	400	208	480	208	208	600	208	400
Input Voltage Range																						
Minimum	Volts	408	408	177	187	510	510	340	408	408	177	187	510	510	340	408	408	177	187	510	510	340
Maximum	Volts	528	528	229	242	660	660	440	528	528	229	242	660	600	440	528	528	229	242	660	660	440
Input / Output Frequency	Hz	60	60	60	60	60	60	50/60	60	60	60	60	60	60	50/60	60	60	60	60	60	60	50/60
AC Input (With input filter)																						
Nominal Amps	Amps	56	56	128	120	45	45	69	72	72	167	156	58	58	90	89	89	205	192	72	72	106
Maximum Amps <sup>2</sup>	Amps	69	69	160	150	56	56	86	90	90	208	195	72	72	112	111	111	256	240	89	89	133
AC Input (Without input filter)																						
Nominal Amps	Amps	66	66	150	142	52	52	81	85	85	196	186	68	68	105	105	105	241	228	84	84	126
Maximum Amps <sup>2</sup>	Amps	82	82	188	178	65	65	101	106	106	245	232	85	85	131	131	131	301	285	105	105	157
Bypass Input																						
Nominal Amps	Amps	60	60	139	131	48	48	74	78	78	180	171	63	63	97	96	96	222	210	77	77	115
AC Output																						
Nominal Amps	Amps	139	60	139	139	48	139	74	180	78	180	180	63	180	97	222	96	222	222	77	222	115
10 Minutes Max.	Amps	174	75	174	174	60	174	93	225	98	225	225	79	225	121	278	120	278	278	96	278	144
DC Link																						
Nominal DC Voltage	Volts	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480
Float Voltage	Volts	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540
End of Discharge <sup>3</sup>	Volts	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401
Maximum Amps <sup>3</sup>	Amps	100	100	100	100	100	100	100	130	130	130	130	130	130	130	160	160	160	160	160	160	160
Physical Attributes (w/o batt.)																						
Installed Weight	Lbs	2000	2000	2475	2475	2475	3400	2475	2000	2000	2475	2475	2475	3400	2475	2000	2000	2475	2475	2475	3400	2475
Installed Width	Inches	34	34	34	34	34	58	34	34	34	34	34	34	58	34	34	34	34	34	34	58	34
System Efficiencies (Typical)																						
@ 100% Load	%	92	92	91	91	91	91	91	92	92	91	91	91	91	91	92	92	91	91	91	91	92
@ 75% Load	%	92	92	91	90	90	90	90	92	92	91	91	91	91	91	92	92	91	91	91	91	92
@ 50% Load	%	92	91	88	88	88	88	88	92	92	89	90	90	90	89	92	92	90	91	91	91	91
Full Load Heat Dissipation																						
BTU/Hr. (x1000)		11.9	11.9	13.5	13.5	13.5	13.5	13.5	15.4	15.4	17.6	17.6	17.6	17.6	17.6	19.0	19.0	21.6	21.6	21.6	21.6	19.0
KCal/Hr. (x1000)		3.00	3.00	3.40	3.40	3.40	3.40	3.40	3.89	3.89	4.43	4.43	4.43	4.43	4.43	4.79	4.79	5.45	5.45	5.45	5.45	4.79
Inverter Efficiency (Full Load)	%	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94

<sup>1</sup> Easily adjustable for 380 or 415 VAC Input/Output, 50 or 60 Hz. <sup>2</sup> Maximum Amps equals full load current plus battery recharge current. <sup>3</sup> End of Discharge based on 1.67 v/cell. Maximum Amps based on 1.8 v/cell.



**Physical Dimensions and Weights**



<sup>1</sup> All accessories feature plug and play capability. Shipping pallet and packaging adds 50 to 300 lbs. per shipping unit. Casters are standard for ease of installation. Specifications subject to change without notice.

All previously mentioned corporate names and brands are registered as trademarks by their respective companies.

**1-877-PWRWARE (797-9273) Powerware Corporation**, (Toll-free in US & Canada) Corporate Headquarters, 8609 Six Forks Road, Raleigh, NC 27615 USA  
 Telephone (US): 1-919-872-3020; Fax (US): 1-800-753-9433; International Telephone: 1-919-870-3238; International Fax: 1-919-870-3300