

# Powerware® 9315-50

## Features

- ▶ DC Expert™ battery management system featuring:
  - +/- 3% Battery Run Time
  - Battery health indication
- ▶ Powerware Hot Sync™ Redundant capability
- ▶ Large display panel provides metering, statistics, alarm history and an active mimic screen
- ▶ Prioritized cooling of components
- ▶ Flexible communication capability
  - Local communications
    - Monitor panel
    - Illuminated indicators
    - Control panel
  - Remote communications
    - Relay interface contacts
    - Building alarm contacts (programmable)
    - Summary alarm contacts
    - RS232 port (standard)
    - EPO kit
    - Remote monitor panel
- ▶ Communications options
  - Embedded communications slot to accept the following cards:
    - ConnectUPS-X SNMP/Web card
    - Multi-server card (S-RS232 serial port output)
    - Single port serial card
  - Expansion chassis available for increased communications capabilities
- ▶ Intelligent input filter option



Model 30 30kVA/24kW  
 Model 40 40kVA/32kW  
 Model 50 50kVA/40kW

## Environmental Specifications

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

## Input Specifications

<b>Voltage range</b>	(See chart on other side)
<b>Frequency range</b>	(60 Hz) 57-63 Hz (50 Hz) 47-53 Hz
<b>Surge protection</b>	Meets IEEE 587, C62.41, Category A & B, EN 50091-2 and EN 50082-2
<b>Power factor</b>	0.95 typical at full load with input filter
<b>Input current distortion</b>	Less than 7% with input filter

## Output Specifications

<b>Voltage THD</b>	Less than 3% for 100% linear load. Less than 5% for 100% non-linear load when tested in accordance with EN50091-3
<b>Voltage regulation</b>	Better than ±1%
<b>Transient response</b>	Less than 5% for 100% load step; full recovery within 1 cycle
<b>Frequency (free run)</b>	±0.005 Hz
<b>Frequency sync range</b>	±0.5 Hz
<b>Frequency slew rate</b>	1 Hz/second maximum
<b>Voltage adjustment range (operator)</b>	±5%

## Battery Specifications

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

## Safety

<b>UL1778 Listed</b>	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
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## Powerware Recommends

Software	Connectivity	Service	System Solutions
<ul style="list-style-type: none"> <li>&gt; PowerVision®</li> <li>&gt; LanSafe™</li> <li>&gt; FORESEER®</li> </ul>	<ul style="list-style-type: none"> <li>&gt; ConnectUPS-X SNMP/WEB card</li> <li>&gt; Multi-server card</li> </ul>	<ul style="list-style-type: none"> <li>&gt; ProActive Service Plan</li> <li>&gt; Preventive Maintenance</li> <li>&gt; CELLWATCH®</li> </ul>	<ul style="list-style-type: none"> <li>&gt; PF² Flywheel</li> <li>&gt; PDM</li> <li>&gt; RPP</li> <li>&gt; Powerware Hot Sync</li> <li>&gt; External Maintenance Bypass</li> </ul>

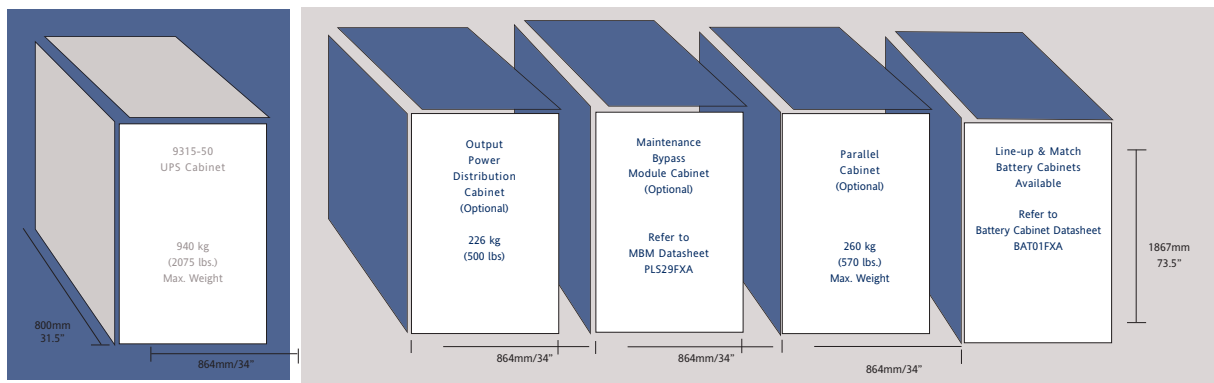
Please contact your sales representative for a solution tailored to your specific needs.

## Powerware 9315-50 Performance Characteristics

		Model 30					Model 40					Model 50				
		30kVA/24kW					40kVA/32kW					50kVA/40kW				
Input voltage	Volts	480	480	208	220	600	480	480	208	220	600	480	480	208	220	600
Output voltage	Volts	208	480	208	208	208	208	480	208	208	208	208	480	208	208	208
Input voltage range																
Minimum	volts	408	408	177	187	510	408	408	177	187	510	408	408	177	187	510
Maximum	volts	528	528	229	242	660	528	528	229	242	660	528	528	229	242	660
Input/output frequency	Hz	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
AC input (with input filter)																
Nominal amps	amps	34	34	77	73	27	45	45	102	97	35	55	55	128	118	44
Maximum amps	amps	42	42	96	91	33	56	56	128	120	44	69	69	160	147	55
AC input (without input filter)																
Nominal amps	amp	39	39	90	86	32	52	52	121	114	42	66	66	150	140	52
Maximum amps	amps	49	49	113	107	39	65	65	151	143	52	82	82	188	175	65
Bypass input																
Nominal amps	amps	36	36	83	79	29	48	48	111	105	38	60	60	139	131	48
AC output																
Nominal amps	amps	83	36	83	83	83	111	48	111	111	111	139	60	139	139	139
10 minutes max.	amps	104	45	104	104	104	139	60	139	139	139	174	75	174	174	174
DC link																
Nominal DC voltage	volts	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
End of discharge	volts	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401
Maximum amps	amps	60	60	60	60	60	80	80	80	80	80	100	100	100	100	100
Physical Attributes (w/o batt.)																
Installed weight	lbs	1750	1750	2075	2075	2075	1750	1750	2075	2075	2075	1750	1750	2075	2075	2075
Installed width	inches	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
System efficiencies (typical)																
@ 100% load	%	91	91	89	89	89	92	92	90	89	90	92	92	90	90	91
@ 75% load	%	89	89	87	87	87	91	91	89	88	89	92	92	90	90	90
@ 50% load	%	87	87	84	84	84	89	89	88	87	88	91	91	89	89	89
Full load heat dissipation																
BTU/hr. (x1000)		8.1	8.1	10.1	10.1	10.1	9.5	9.5	12.14	13.5	12.14	11.88	11.88	15.18	15.18	13.5
KCal/Hr. (x1000)		2.04	2.04	2.55	2.55	2.55	2.39	2.39	3.06	3.4	3.06	2.99	2.99	3.81	3.81	3.40
Inverter efficiency (full load)		94	94	94	94	94	94	94	94	94	94	94	94	94	94	94

Maximum Amps equals full load current plus battery recharge current. End of Discharge based on 1.67 v/cell. Maximum Amps based on 1.8 v/cell. Casters are standard for ease of installation.

### Physical Dimensions and Weights



Shipping pallet and packaging adds 50 to 300 lbs. per shipping unit. • All accessories feature plug and play capability.

Due to continuing improvement programs specifications are subject to change without notice. Battery run times are approximate and may vary with equipment, configuration, battery age, temperature, etc. Powerware®, CELLWATCH, DC Expert, Foreseer, Hot Sync, and PowerVision are trademark(s) of Powerware Corporation. © 2004 Powerware Corporation

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