



# Powerware

## Powerware® 9315-225 Uninterruptible Power System

Product Focus

Model 225 225 kVA/202 kW/180 kW



### Features

- DC Expert® battery management system featuring: +/- 3% battery runtime; Battery health indication
- Powerware Hot Sync™ technology for parallel redundancy and capacity scalability
- Large display panel provides metering, statistics, alarm history and an active mimic screen
- Prioritized cooling of components
- Power Management Software compatibility
  - PowerVision®, LanSafe™, FORESEER®
  - Software Suite CD is bundled with the UPS
- Connectivity options
  - ConnectUPS-X Web Card, Modbus Card, Single port serial Card
  - Environmental Monitoring Probe for ambient temperature and humidity monitoring (requires the Web Card option)
  - Expansion Chassis available for increased communications capabilities
- Intelligent input filter option

#### 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 2.5 ms
Frequency:	±0.005 Hz
Frequency sync range:	±0.5 Hz
Frequency slew rate:	1 Hz/second maximum
Output Power Factor Rating:	0.8 lagging to 0.9 leading without load derating

#### Environmental Specifications

Ambient temp:	0°C to +40°C
Storage:	-20°C to +70°C
Relative humidity:	Up to 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 25 kV 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)

#### 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
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This unit is also available in wireless, parallel, redundant and capacity configurations. See your Powerware product representative for more details.

#### Input Specifications

Voltage range:	(See chart on other side)
Frequency range:	(60 Hz) 57-63 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

#### Battery Specifications

Matching cabinets:	Line-up and remote available
Battery type:	Sealed, valve regulated lead acid
Recharge time:	10-12 times the discharge time to 95%
Other battery options:	Wet cell batteries; open racks available

For battery runtimes and configurations, refer to Bulletin BAT01FXA

#### Communications

Software Compatibility:	PowerVision®, LanSafe™, FORESEER®
Communication Cards:	Connect UPS-X Web Card Modbus Card Single port serial Card Environmental Monitoring Probe (EMP)*

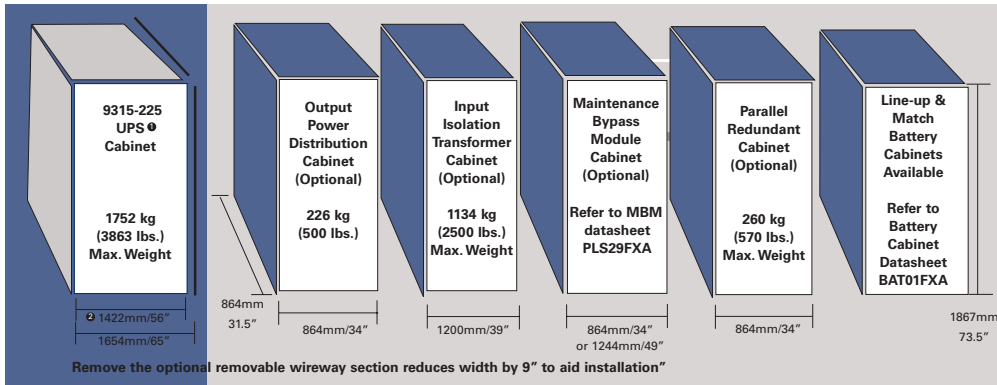
\* Requires Connect UPS-X Web Card

## POWERWARE 9315-225 PERFORMANCE CHARACTERISTICS

		225 kVA/ 180 kW	225 kVA/ 202 kW	225 kVA/ 180 kW	225 kVA / 202 kW	225 kVA 180 kW	225 kVA/ 202 kW
Input voltage	volts	208	208 <sup>Ⓞ</sup>	480	480 <sup>Ⓞ</sup>	480	480 <sup>Ⓞ</sup>
Output voltage	volts	208	208	208	208	480	480
<b>Input voltage range</b>							
Minimum	volts	177	177	408	408	408	408
Maximum	volts	229	229	528	528	528	528
Input/output frequency	Hz	60	60	60	60	60	60
<b>AC input (with input filter)</b>							
Nominal amps	amps	577	711	245	267	245	267
Maximum amps	amps	721	790	312	334	312	334
<b>AC input (without input filter)</b>							
Nominal amps	amps	640	792	288	356	288	356
Maximum amps	amps	880	880	360	396	360	396
<b>Bypass input</b>							
Nominal amps	amps	625	625	625	625	271	271
<b>AC output</b>							
Nominal amps	amps	625	625	625	625	271	271
10 minutes max.	amps	782	782	782	782	339	339

		225 kVA/ 180 kW	225 kVA/ 202 kW	225 kVA/ 180 kW	225 kVA / 202 kW	225 kVA 180 kW	225 kVA/ 202 kW
<b>DC link</b>							
Nominal DC voltage	volts	480	480	480	480	480	480
Float voltage	volts	540	540	540	540	540	540
End of discharge	volts	401	401	401	401	401	401
Maximum amps @1.8v/cellamps		450	505	450	505	450	505
<b>Physical attributes (w/o batt.)</b>							
Installed weight	kg.	6363	6363	3863	3863	3863	3863
Installed width	inches	103	103	65	65	65	65
<b>System efficiencies (typical)</b>							
@ 100% load	%	92	92	93	93	94	94
@ 75% load	%	92	91.6	92	91.8	94	93.6
@ 50% load	%	91	91.4	92	91.5	93	92.4
<b>Full load heat dissipation</b>							
BTU/hr. (x1000)		53.7	62.8	46.2	54.3	39.2	46.1
KCal/hr. (x1000)		13.5	15.8	11.7	13.8	9.9	11.6
Inverter efficiency (full load)%		95	95	95	95	95	95

## Physical Dimensions and Weights



- Optional .9 power factor.
- All accessories feature plug and play capability.
- Shipping pallet and packaging adds 50 to 300 lbs. per shipping unit.

Due to continuing improvement programs specifications are subject to change without notice. Battery runtimes are approximate and may vary with equipment, configuration, battery age, temperature, etc.

