



# Powerware

## Powerware® 9315-400 Uninterruptible Power System

Product Focus

Model 300 300 kVA/270 kW/240 kW  
Model 400 400 kVA/360 kW/320 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
  - 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 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%

#### Environmental Specifications

Ambient temp:	0°C to +40°C
Storage:	-20°C to +70°C
Relative humidity:	5-95% non-condensing
Altitude:	1500 meters (5000 ft.) at 40°C ambient temperature without load derating
Audible noise:	Less than 72 dBA at 1 meter; in accordance with ISO 7779
Electrostatic discharge:	Withstands 8 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

EN 50091-1  
All cabinets provide seismic mounting features and selectable DC ground fault detection capability

#### Input Specifications

Voltage range:	(See chart on opposite 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 data sheet BAT01FXA

#### Communications

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

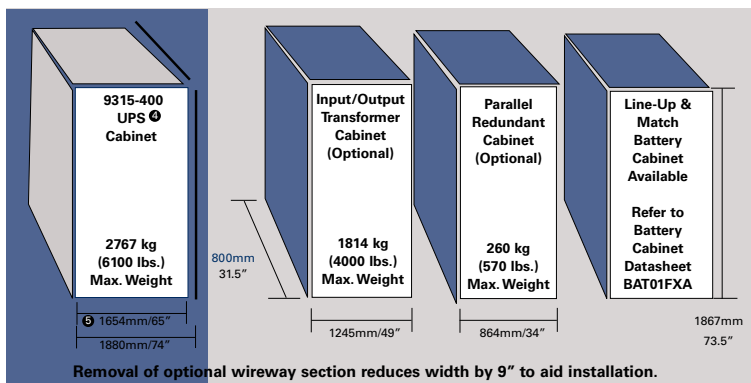
\* Requires Connect UPS-X Web Card

## POWERWARE 9315-400 PERFORMANCE CHARACTERISTICS

		Model 400		Model 300	
		400 kVA/ 320 kW	400 kVA/ 360 kW	300 kVA/ 240 kW	300 kVA/ 270 kW
Input voltage	volts	400	400 <sup>①</sup>	400	400 <sup>①</sup>
Output voltage	volts	400	400	400	400
<b>Input voltage range</b>					
Minimum	volts	340	340	340	340
Maximum	volts	440	440	440	440
Input/output frequency	Hz	50/60	50/60	50/60	50/60
<b>AC input (with input filter)</b>					
Nominal amps <sup>②</sup>	amps	508	572	381	429
Maximum amps	amps	635	715	476	536
<b>AC input (without input filter)</b>					
Nominal amps <sup>②</sup>	amps	598	640	448	490
Maximum amps	amps	747	800	560	613
<b>Bypass input</b>					
Nominal amps	amps	577	577	433	433
<b>AC output</b>					
Nominal amps	amps	577	577	433	433
10 minutes max.	amps	721	721	541	541

		Model 400		Model 300	
		400 kVA/ 320 kW	400 kVA/ 360 kW	300 kVA/ 240 kW	300 kVA/ 270 kW
<b>DC link</b>					
Nominal DC voltage	volts	420	420 <sup>①</sup>	420	420 <sup>①</sup>
Float voltage <sup>③</sup>	volts	473	473	473	473
End of discharge <sup>④</sup>	volts	351	351	351	351
Maximum amps @1.8v/cellamps		914	1030	686	772
<b>Physical attributes (w/o batt.)</b>					
Installed weight	lbs.	6100	6100	6100	6100
Installed width	inches	74	74	74	74
<b>System efficiencies (typical)</b>					
@ 100% load	%	94	94	93.5	93.5
@ 75% load	%	94	94	93.5	93.5
@ 50% load <sup>⑤</sup>	%	93	92.5	92.5	92.5
<b>Full load heat dissipation</b>					
BTU/hr. (x1000)		95.8	107.9	71.7	81.0
KCal/hr. (x1000)		24.1	27.2	18.1	20.4
Inverter efficiency (full load)%		94	94	93.5	93.5

## Physical Dimensions and Weights<sup>⑥</sup>



- ① Optional .9 power factor.
- ② Maximum amps equals full load current plus battery recharge current.
- ③ End on Discharge based on 1.67 v/cell. Maximum Amps based on 1.8 v/cell.
- ④ All accessories feature plug-and-play capability.
- ⑤ Removable wireway section reduces width by 9" to aid installation.
- ⑥ Refer to Installation Manual for actual system line-ups.
- ⑦ Heat rejection data is worst case to ensure cooling capacity (includes losses from filters and transformers).

Shipping pallet and packaging adds 50 to 300 lbs. per shipping unit. Specifications subject to change without notice.

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