

Benefits

- ▶ **Maximum Availability** – with true double conversion online design, the proven technology that is used for the most mission-critical applications in the world. It's unusual to find line-interactive, pseudo-online or any other kind of UPS, other than double conversion online, supporting 24/365 data centers, facilities, ISPs and major telecommunications installations.
- ▶ **Maximum Reliability** – with Powerware Hot Sync®, the award-winning, patented technology that achieves paralleling for redundancy and capacity (up to four modules) with no system-level single-point-of-failure. The preferred paralleling technology installed around the world with such major customers as E*Trade, Colo.com, and Citibank, Powerware Hot Sync will be available in the 10-40 kVA range with the Powerware 9330*.
- ▶ **Maximum Efficiency** – the Powerware 9330's advanced design features efficiency of up to 96%, at rated kVA and power factor, higher than any double conversion online UPS on the market today. Efficiency further increases to 97% with the debut of Powerware's Energy Optimizer*. No need to compromise reliability for efficiency with the Powerware 9330.
- ▶ **Maximum Performance** – the Powerware 9330 delivers the highest performance by using digital signal processing, true pulse-width-modulation and maximum IGBT responsiveness. This provides easy setup, drift-free operation and a pristine output.
- ▶ **Global Services** – Powerware service professionals provide round-the-clock monitoring, remote diagnostics, and on-site maintenance programs. More than just a material warranty, this is the most comprehensive service coverage available in the industry. Powerware Global Service provides you with peace of mind that potential downtime is prevented by proactive service and monitoring.

*Available mid-2001

Powerware® 9330

Model 20 and Model 40



Designed specifically to meet the high-availability needs of critical 24x7 applications for small to medium-size businesses, the Powerware 9330 delivers enhanced systems reliability and the highest efficiency ratings of any online UPS in the 10 – 40 kVA range. The 9330 also contains high-end features and benefits that only existed in larger capacity UPS, until now.

IT managers must implement the most efficient solutions possible, without compromising the business need for availability. Through its well-thought-out design, the Powerware 9330 helps IT managers meet both the high availability and operational efficiency requirements they face by eliminating a primary cause of downtime: power problems. The advanced features of the Powerware 9330 include:

Digital Signal Processing and Pulse-Width Modulation

True pulse-width modulation is achieved through the use of digital signal processing, which enables the IGBTs to work at their highest capacity, increasing system reliability and ensuring perfect power on the output.

Product Snapshot

Power Rating: 10, 15, 20, 25, 35 and 40kVA
Voltage: 208/208, 480/208, 480/480, 600/208 VAC
Frequency: 50/60Hz

Built-in Control Area Network (CAN)

An integral internal and external Control Area Network (CAN) is incorporated into the Powerware 9330 that assists in seamlessly integrating peripherals and options, controllable from the control panel. It also reduces the internal wiring connections required therefore increasing overall system reliability.

Superior Cooling Design

The superior cooling design of the Powerware 9330 draws from Powerware's extensive, almost 40 years of industry and product development experience. This design, which features redundant fans, ensures that more thermally sensitive areas are cooled first.

Comprehensive Communications & User Interface

A large display, mimic and control panel is ergonomically situated for operator interface with the unit. The soft keypad helps guide the operator through all menus and setups. A dedicated micro-processor had been designed and engineered to provide full-featured monitoring and extensive alarm history. It allows for additional communication options, like Internet accessibility, Ethernet, network links, and modems.

Internal Battery

The Powerware 9330 comes with internal batteries that provide up to 12 minutes of backup at full load. The batteries are easily accessible and maintained through front access slide-out trays. The Advanced Battery Management™ (ABM) feature significantly enhances battery life.

Powerware® 9330 Model Selection Guide

Powerware 9330-20 Performance Characteristics		Model 10 10kVA/7kW				Model 15 15kVA/10.5kW				Model 20 20kVA/14kW			
Input Voltage	Volts	208	480	480	600	208	480	480	600	208	480	480	600
Output Voltage	Volts	208	208	480	208	208	208	480	208	208	208	480	208
Input/output Frequency	Hz	50/60	60	60	60	50/60	60	60	60	50/60	60	60	60
Input Voltage Range													
Minimum	Volts	177	408	408	510	177	408	408	510	177	408	408	510
Maximum	Volts	228	528	528	660	228	528	528	660	228	528	528	660
AC Input													
Nominal	Amps	22	10	10	8	32	14	15	11	43	19	20	15
Maximum	Amps	29	13	13	10	40	18	18	15	51	23	23	19
Bypass Input													
Nominal Amps	Amps	28	12	12	10	42	18	18	14	56	24	24	19
AC Output													
Nominal Amps	Amps	28	28	12	28	42	42	18	42	56	56	24	56
10 Minutes	Amps	35	35	15	35	52	52	23	52	69	69	30	69
Battery													
Nominal Voltage	Volts	288	288	288	288	288	288	288	288	288	288	288	288
Float Voltage @ 25°C	Volts	336	336	336	336	336	336	336	336	336	336	336	336
Charge Current	Amps	7	7	7	7	7	7	7	7	7	7	7	7
Nominal Discharge Current	Amps	26	26	26	26	39	39	39	39	52	52	52	52
Total Cell Count		144	144	144	144	144	144	144	144	144	144	144	144
System Efficiency ①													
@ 100% Load	%	91%	88%	86%	86%	92%	89%	87%	87%	92%	90%	88%	90%
@ 75% Load	%	90%	87%	85%	85%	92%	89%	86%	86%	92%	90%	88%	90%
@ 50% Load	%	88%	85%	83%	83%	91%	88%	85%	85%	92%	90%	88%	90%
.7pf @ 100% load	%	96%	93%	91%	93%	96%	94%	92%	94%	96%	94%	92%	94%
Max. Heat Dissipation													
BTU/Hr. (x1000)		3.3	4.2	4.8	4.8	4.1	5.4	6.3	6.3	5.1	6.3	7.5	6.3
kcal/Hr. (x1000)		0.8	1.1	1.2	1.2	1.0	1.4	1.6	1.6	1.3	1.6	1.9	1.6
Inverter Efficiency (Full Load)	%	93%	93%	90%	93%	94%	94%	92%	94%	94%	94%	92%	94%
Physical Attributes (max.)													
Width (inches)		22	39	39	39	22	39	39	39	22	39	39	39
Height (inches)													
① Depth (inches)													

Efficiency shown takes into account the output and input transformer for input or output voltages other than 208V.

Powerware 9330 - 40 Performance Characteristics		Model 25 25kVA/17.5kW				Model 30 30kVA/21kW				Model 35 35kVA/24.5kW				Model 40 40kVA/28kW			
Input Voltage	Volts	208	480	480	600	208	480	480	600	208	480	480	600	208	480	480	600
Output Voltage	Volts	208	208	480	208	208	208	480	208	208	208	480	208	208	208	480	208
Input/output Frequency	Hz	50/60	60	60	60	50/60	60	60	60	50/60	60	60	60	50/60	60	60	60
Input Voltage Range																	
Minimum	Volts	177	408	408	510	177	408	408	510	177	408	408	510	177	408	408	510
Maximum	Volts	229	528	528	660	229	528	528	660	229	528	528	660	229	528	528	660
AC Input																	
Nominal	Amps	55	24	24	19	66	29	29	23	77	34	34	27	82	38	38	30
Maximum	Amps	70	30	30	24	83	36	36	29	97	42	42	34	100	48	48	38
Bypass Input																	
Nominal Amps	Amps	69	30	30	24	83	36	36	29	97	42	42	34	111	48	48	38
AC Output																	
Nominal Amps	Amps	69	69	30	69	83	83	36	84	97	97	42	96	111	111	48	112
10 Minute Amps	Amps	86	86	38	86	104	104	45	105	121	121	53	120	139	139	60	140
Battery																	
Nominal Voltage	Volts	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Float Voltage @ 25o C.	Volts	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336
Nominal Discharge Current	Amps	64	64	64	64	78	78	78	78	91	91	91	91	100	100	100	100
System Efficiency ①																	
@ 100% load	%	92%	90%	88%	90%	92%	90%	88%	90%	92%	90%	88%	90%	93%	91%	89%	91%
@ 75% load	%	91%	89%	87%	89%	92%	90%	88%	90%	92%	90%	88%	90%	92%	90%	88%	90%
@ 50% load	%	89%	87%	85%	87%	91%	89%	87%	89%	91%	89%	87%	89%	92%	90%	88%	90%
.7pf @ 100% load	%	97	93	91	93	96	94	92	94	96	94	92	94	96	94	92	94
Maximum Heat Dissipation																	
BTU/Hr. (x1000)		4.8	6.0	7.2	6.0	5.7	7.2	8.6	7.2	6.7	8.4	10.0	8.4	6.7	8.6	10.5	8.6
kcal/Hr. (x1000)		1.2	1.5	1.8	1.5	1.4	1.8	2.2	1.8	1.7	2.1	2.5	2.1	1.7	2.2	2.6	2.2
Inverter Efficiency (Full Load)	%	93%	93%	91%	93%	93%	93%	91%	93%	93%	93%	91%	93%	94%	94%	92%	94%
Physical Attributes (max.)																	
Width	inches	39	61	61	61	39	61	61	61	39	61	61	61	39	61	61	61
Height	inches	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
① Depth	inches	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

Efficiency shown takes into account the output and input transformer for input or output voltages other than 208V.

Invensys Power Systems
8609 Six Forks Road
Raleigh, NC 27615 U.S.A.
Toll Free: 1.877.797.9273
or 919.872.3020
Fax: 1.800.753.9433
www.invensys-power.com

Europe/Middle East/Africa
Berkshire, England: 44.1753.608700

Southeast Asia
Singapore: 65-8610377

China and North Asia
Hong Kong: 852.2745.6682

Japan
Shinagawa Tokyo: 813.3447.5251

Australia and South Pacific
Sydney, Australia: 612..9878.5000

Canada
Toronto, Ontario: 416.798.0112

Brazil
Sao Paulo, Brazil:
55.11.3933.8555/855.8500

Mexico
Col. Napoles C.P.,
Mexico 525.527.61.69/
525.488.33.33

