



## Powerware 9390 UPS Frequently Asked Questions

*\* Updated information*

### **Technical Issues / Product Availability**

*\* 1. When will the Powerware 9390 Integrated Distribution Cabinet be available?*

The Powerware 9390-80kVA Integrated Distribution Cabinet (IDC) is currently available. The Powerware 9390-160kVA IDC is currently on schedule for release with the Powerware 9390-160kVA UPS.

*\* 2. Are there any differences between the Cutler Hammer Maintenance Bypass Panels for the Powerware 9390 vs. those for the Powerware 9315?*

Yes, since the Powerware 9390's output is rated at a higher power factor than that of the Powerware 9315, slightly larger breaker ratings are required in the Maintenance Bypass Panels. The Powerware 9390 price list includes the selection of MBPs (all designed with the correct breaker sizes) available for the 9390.

*\* 3. Are there any issues with placing the Powerware 9390 IDC in a location that does not allow rear or side access?*

No issues for installation or operation.

*\* 4. Can the Powerware 9390 IDC be ordered with distribution breakers other than 225A?*

Not at this time. We recommend ordering these breakers separately and having them installed onsite by the contractor.

*\* 5. Are floor stands available for the Powerware 9390?*

Floor stands for the Powerware 9390 are not yet available directly from Powerware. If floor stands are immediately required, contact Intrapack (you will need to supply the 9390 dimensional drawings from the Powerware 9390 Installation and Operation Manual) to have them built.

*\* 6. Are transformers required to accomplish 230 VAC input/output?*

Yes, transformers are needed to accomplish 230 VAC input/output on the Powerware 9390.

*\* 7. What is the maximum single-phase current available on the Powerware 9390-80 kVA model?*

The Powerware 9390 80 kVA can handle 100% load imbalance, as each phase is independently regulated.

*\* 8. What is the heat loss of the Powerware 9390-80 kVA IDC?*

With the UPS at full load (0.9 power factor), heat loss is approximately 1500w for 208v and 480v units.

*\* 9. When will parallel configurations for the Powerware 9390-160 kVA model be available?*

Parallel configurations for the Powerware 9390-160 kVA are currently scheduled for availability during December 2004.

*\* 10. If the customer does not order dress skins, is the hanger visible on the Powerware 9390 UPS?*

We took a slightly different approach to dress skins for the Powerware 9390. For the 9390, neither the UPS nor the IDC comes standard with dress skins or hangers. However, all 9390 battery cabinets have dress skins with hangers on both ends. The logistics are simple: remove the dress skin and hanger from the side of the battery cabinet that installs up against the UPS. Then mount this hanger and dress skin on the opposite side of the UPS (or IDC cabinet). We have optional dress skin kits for both the UPS and IDC cabinet in case they are not mounted in a line-and-match arrangement.

*\* 11. The Powerware 9390 UPS Guide Specification indicates a 94% efficiency rate for the 80 kVA model. However, when using the indicated BTU/HR rate to calculate the efficiency, I come up with a 91% efficiency rate. Which rating is correct?*

Actually, both ratings are correct. The 94% efficiency rating is based upon the industry norm of calculating the efficiency rating at full-rated kW. The BTU/HR rate shown in the Powerware 9390 Installation and Operation manual accounts for additional losses incurred during battery recharge (not a steady state operation mode). We publish the "worst case" BTU/HR rate to enable customers to correctly size their air conditioning equipment for all operational conditions of the UPS system.

*12. Is the Powerware 9390 seismic rated?*

We are currently working on qualifying the Powerware 9390 for Uniform Building Code (UBC) Zone 4 seismic rating. We will have a seismic mounting kit for the UPS available in August; a kit for the IDC will be available in September. Until then, any requirements for seismic battery cabinets will have to be satisfied by remote third-party suppliers.

*13. What inverter efficiency should be used to calculate battery run times?*

Use 93% to calculate battery run times for the Powerware 9390.

*14. What is the longest battery run time supported by the Powerware 9390 UPS?*

The Powerware 9390 can support up to four (4) cabinets of J47 batteries, which provides over five (5) hours of run time.

*15. Can NiCad batteries be used with the Powerware 9390?*

Using NiCad batteries with the Powerware 9390 is possible, although firmware and EEP tables would need to be modified for proper operation. Please contact your Powerware ISE for additional information.

## Connectivity

*\* 1. Can I use the same Remote Monitor Panel used on the Powerware 9315 with the Powerware 9390?*

The Powerware 9390 does not have the same capability as the Powerware 9315 in relation to remote RS485 communication devices. The Powerware 9315 supplies 24VDC in addition to the RS485 information (which limits the 9315 to driving two (2) remote RS485 devices); the Powerware 9390 and required X-slot card send the same RS485 information but do not include the 24V output.

That said, it is possible to use an existing remote monitor panel with the Powerware 9390. However, the customer must supply their own 24VDC to power any of the RS485 devices. (DC power supplies can be purchased from Eaton Corporation and many other suppliers.) The 24VDC supply must provide a minimum of one (1) amp at 24VDC to power these devices.

We are currently developing a new Remote Monitor Panel—scheduled for September 2004 release—for use with the Powerware 9390.

*2. Does the Powerware remote monitoring service require the customer to provide Powerware equipment or personnel with direct access to the customer's network?*

Activating Powerware remote monitoring **does not** provide Powerware equipment or personnel with direct access to the customer's network. All alarm notifications are sent via email.

*3. Can a modem card be used in the X-slot for remote monitoring?*

Although it is not recommended, a modem card may be used in place of a Web/SNMP card. Using a modem card, however, will prevent the customer from taking advantage of advanced reporting features to be made available in the future. For this reason, the customer should always use the Web/SNMP card that is shipped with the unit from the factory.

*For additional information regarding any of the above issues, please contact your Powerware ISE.*

## Service

*1. What is covered by the Powerware 9390 limited factory warranty vs. the service protection package?*

The Powerware 9390 limited factory warranty provides two (2) years of parts and labor coverage for the UPS. The service protection package provides two years of battery replacement labor coverage (requires activation of Powerware remote monitoring); one (1) onsite, 5x8 preventive maintenance visit; one (1) power protection audit; two (2) years of remote monitoring; 5x8 start-up service; and 7x24 technical support.

*2. My customer does not want to activate the Powerware remote monitoring service. Will this void the coverage provided by the two-year limited factory warranty or service protection package?*

Failure to activate Powerware remote monitoring will not affect the UPS coverage provided by the Powerware 9390 limited factory warranty. However, customers who fail to activate Powerware remote monitoring within 90 days of start-up will not enjoy the battery replacement labor coverage provided by the Powerware 9390 service protection package. Activation of remote monitoring enables both Eaton's Powerware Division and the customer to fulfill the requirements of the battery manufacturer's parts warranty.

*3. What's included in the Powerware remote monitoring service?*

The Powerware remote monitoring service provides 7x24, real-time monitoring of 100+ UPS and battery alarms. Monthly email reports detail UPS and battery performance, and the Relative Health Index of the overall system.

*For additional information regarding Powerware 9390 service issues, please contact Arthur Mulligan, (919-878-1066), [art.mulligan@powerware.com](mailto:art.mulligan@powerware.com)).*