

POWERWARE 3-PHASE UPS cont...

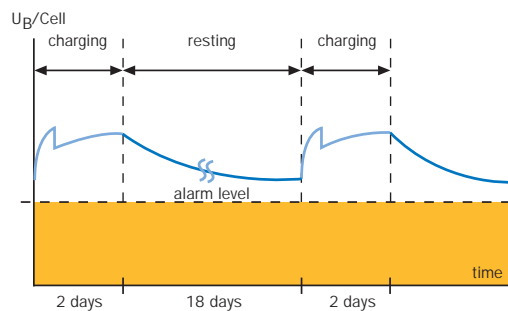
The Powerware 3-phase widely covers the needs of power protection in many applications that rely on continuous, conditioned power. In true Powerware style, it also sports features that make operation and maintenance a breeze.

Advanced Battery Management™

UPS systems have a maintenance free lead-acid battery solution that is both critical and expensive for the user. The expected lifetime of batteries is also shorter compared to the rest of the UPS system. Therefore, one should pay close attention to the right battery solution with advanced charging technology.

Today, virtually all competitive UPS products on the market have VRLA batteries with traditional float charging technology. ABM™ is different because of the three-stage charging technique that constantly monitors the battery charging status and recharges only when necessary. In result the internal battery corrosion is reduced dramatically to provide 50% longer battery life time compared to the float charging technology.

ABM™ with the intermittent charging method



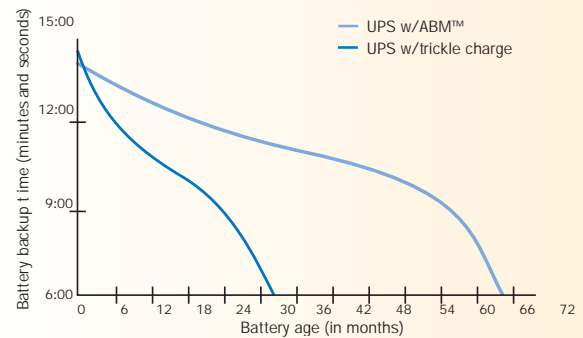
Powerware Hot Sync™ Technology

The absolute reliability of UPS system can be increased close to 100% with the US patented Hot Sync™ parallel load sharing technology. It is designed for parallel redundant N+1 systems to satisfy the 7/24h applications. The Hot Sync™ can also be used in parallel capacity systems to benefit from the scalability for customer's ever increasing load demands.

Competitive UPS products on the market utilise centralised or distributed load sharing technology with master-slave principle. The Hot Sync™ erases the single point of failure logic within the traditional load sharing systems because of the ability to synchronise and support the critical load independently of the other UPS modules. The UPS modules can share a critical load even without any communication wiring to outside world.

Moreover, the Hot Sync™ technology allows full maintenance to be performed one-by-one on redundant UPS modules without the external maintenance bypass switch. The critical load needs not to be removed from the conditioned power. Scheduled or unscheduled maintenance needs can be performed with the critical load supported constantly by the UPS grade clean power.

ABM™ guarantees low battery corrosion and long life time

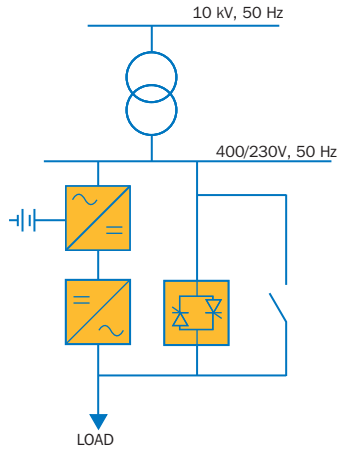


Efficiency Optimiser™

The high efficiency mode can be activated by the operator. It forces the Powerware 3-phase UPS to use the bypass source when the mains power quality is acceptable for the load. However, the UPS transfers to double conversion or battery mode if a serious power problem threatens the load. In consequence, the Efficiency Optimiser™ cuts down the electrical bill by minimising power losses.

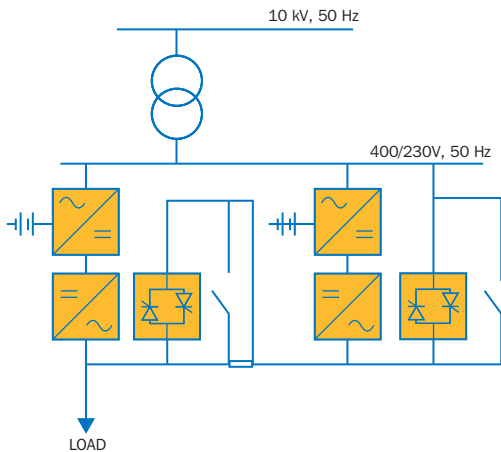
Depending on your needs, you can choose from several alternative configurations.

Standard System



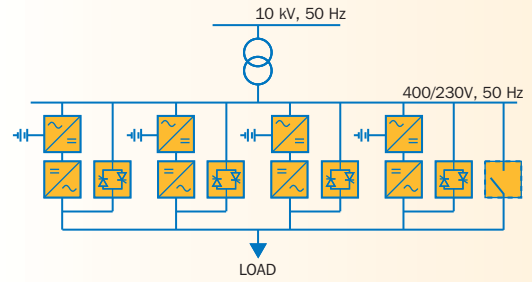
A single UPS unit capable of supplying power to the critical load. The critical load is transferred to the bypass source via the static switch if the unit fails or the load becomes too great. A mechanical bypass switch is used for maintenance purposes.

Hot Standby System



When the criticality of your load is greater, you can opt for two single UPS units with a special connection to increase power availability. The critical load is powered by the first UPS unit. In case of failure, the critical load is transferred to the bypass source that is supplied by the second unit. This configuration enables redundant operation with standard UPS units.

Hot Sync™ Redundancy or Capacity



Hot Sync™ Redundant is N+1 module system for the most critical applications and allowing full maintenance to be performed on a single module without the need for an external maintenance bypass switch. The critical load never needs to be removed from conditioned power.

Hot Sync™ Capacity can accommodate up to four modules in parallel for the most maximum output power. Hot Sync™ Redundant can be easily switched Hot Sync™ Capacity as the power requirement grows and there is no time to wait the redundant upgrade module.