



Innovative technologies will give you the best return on your UPS investment

Technology innovations

To meet the constantly evolving and changing needs of UPS users, leading manufacturers are continually developing new and innovative technologies that deliver significant benefits in terms of performance, reliability, versatility and cost of ownership.

In IT and electronics, technology moves quickly. For example, the latest televisions and home computers have much more to offer than their predecessors. Developments in UPSs may be a little less obvious, but they're just as dramatic. When you buy a UPS, therefore, it pays to be sure that it incorporates the latest key technologies.



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UPS technology innovations

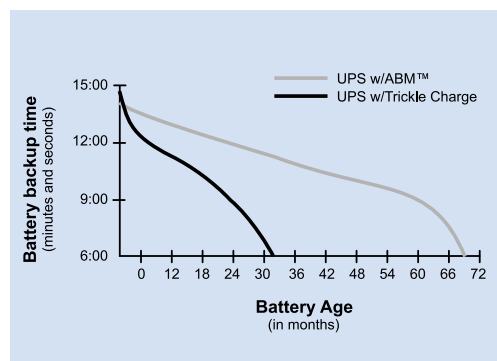
Here are some UPS technologies to look out for:



- **ABM technology** – In traditional UPSs, batteries are trickle charged, which shortens their lives. ABM uses intelligent charging to charge batteries only when needed increasing battery life by up to 50%. ABM also provides advance warning of weak batteries that will soon need to be replaced.
- **Hot Sync** – With Hot Sync, UPSs connected in parallel can share the load effectively without needing to communicate with each other. This eliminates a potential single point of failure – the communication system – greatly enhancing resilience and reliability.

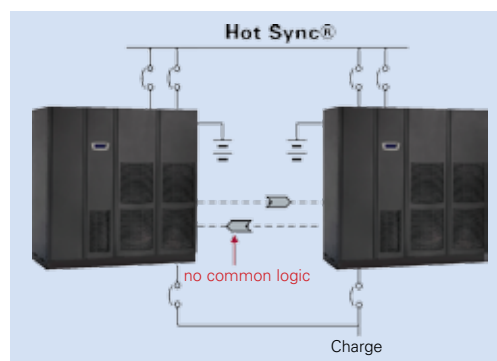
In addition to ABM and Hot Sync, larger, three-phase UPS's can also include these technologies:

- **Energy Saver System (ESS)** – A UPS with ESS can achieve 99% efficiency when power quality is good by delivering mains power direct to the load. If power quality deteriorates, ESS switches to double-conversion mode in less than two milliseconds, providing comprehensive load protection. The transition to double conversion mode is so fast that it's invisible to the loads.
- **Variable Module Management System (VMMS)** – UPS systems are often lightly loaded, but with loads of 40% or less, their efficiency falls. UPSs with VMMS however incorporate multiple power conversion modules. When the load is light, VMMS puts some modules into low-power mode, allowing the remaining ones to work efficiently. When the load increases, VMMS brings the idle modules back on line as needed.
- **Easy Capacity Test** – The entire power train of a UPS that has Easy Capacity Test can be tested under full load stress without the need for an external load and while drawing only minimal power from the mains supply.



ABM technology significantly increases battery service life.

Investing in UPSs that use the latest technologies will give you big operational and financial benefits, so it's vital to be technology aware. As Professor Wattson says, always choose today's technologies to meet today's requirements.



Patented Hot Sync technology provides highest availability for load.