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UPS DEFINITIONS

TO HELP BUST THE JARGON

If you're trying to specify a UPS system, you'll find yourself confronted, as with any technology, by a fair amount of jargon – which could be confusing if you're not familiar with it. Our Jargon Buster below is intended to clear away any such confusion and to help you decide the best UPS for your requirements.

Availability

A measure of how much time per year a UPS system is operational and available.

Hot-swap module

Hot-swap modules can be safely plugged into or removed from a UPS system without having to interrupt power to the critical load or expose it to raw mains power.

kVa

kVA or kilovolt-ampere (1000 volt-amperes) is a measure of the apparent power rating of a UPS or other power device.

Power Factor (pf)

Power Factor is the relationship between actual/active power and apparent power. Low power factors are undesirable as they create large reactive currents which increase energy costs and impose higher equipment ratings without performing useful work.

Redundancy

Redundancy is whereby a UPS has additional power module(s) so that in the event of a fault, replacement or other disturbance to one power module, the UPS system remaining power modules are capable of maintaining power protection to the critical load.

Lead Acid Battery

Lead acid batteries are the most used battery type for stationary applications. Expected life for this kind of batteries is typically a 3-5 year or 8-10-year, installation/cycle/environment dependent.

Nickel-cadmium battery (NiCd)

NiCd batteries have a higher power density, a slightly greater energy density and the number of cycles is higher. NiCd batteries are relatively rugged, are the only batteries capable of performing well even at low temperatures.

Lithium-ion battery (Li-ion)

Li-ion batteries are lighter and needs less floor space compared to LA or NiCd batteries. For Li-ion batteries, the calendar life (over 10 years) and cycle life (thousands of cycles) are very good even at high temperatures.

Fast EcoMode

FAST EcoMode is whereby the UPS supplies the critical load via its bypass line, this increases the efficiency of the UPS as it is not conditioning the output like it would be if in online mode.

Static Transfer Systems (STS)

Static Transfer Systems (STS) are intelligent units that transfer the load to an alternative source when the primary source is out of tolerance or no longer present. This ensures "high availability" of the power supply for sensitive or critical installations.