

U

ninterruptible Power Supply

An Uninterruptible Power Supply (UPS) is a device that sits between the mains power supply and the “loads” or devices drawing power, such as PCs, servers, routers, switches, appliances, and other electrical items. Most rely on a battery charger / rectifier, battery and inverter to supply power at appropriate moments, and offer power conditioning and sufficient back-up power to allow controlled shut-down of computer systems during outages.

Utility companies cannot always provide the consistent and reliable power required by today’s IT dependent businesses. On top of this many buildings have aging electrical infrastructure, which can make it very difficult for facility managers to supply occupants with the clean and continuous power needed for sophisticated computing and network equipment needs.

Loss of power for even a short period of time can cause serious problems for IT servers, computer networks, telephone and security systems, manufacturing processes and other technology dependent services. Power surges, spikes and dips can be equally devastating to IT systems and other sophisticated electronics. Loss of these systems can have serious negative impact on customer service and data causing severe long term damage to the organisation.

A UPS will provide stored power for short periods by switching instantaneously to batteries in the event of a mains failure or even just a dip in power. As part of a comprehensive business continuity power solution a UPS may allow a controlled shut-down of IT servers or be used with a standby generator or standby power supply (SPS) to allow the whole building to continue running.

UPS solutions come in a variety of sizes scaled to protect a single workstation or a whole buildings critical systems. It is crucial that such important systems are properly maintained and regularly tested or the desired protection may not be available when needed.

The bestselling book on this subject is “The Power Protection Guide: The Design, Installation and Operation of Uninterruptible Power Supplies” by Robin Koffler and Jason Yates published by Stillwater Publishing ISBN 095544280X