## Clean, Reliable Power for Uninterrupted Science

Robust systems electrically protect instruments and provide seamless backup power

Chromatography and mass spectrometry instruments are powerful workhorses in many laboratories, enabling analysis of multiple samples and producing large amounts of data. Without proper protective measures in place, power surges and incorrect voltages can damage these sophisticated instruments, and power outages can halt a run. leading to the loss of valuablesometimes irreplaceable— samples. The instrument downtime associated with power failure or repairs reduces productivity and contributes to financial loss. Combining a power distribution unit (PDU) with a reliable battery backup uninterruptible power supply (UPS) system provides clean, conditioned, uninterrupted power to prolong instrument life, and protects valuable samples and data. Battery Backup Power Inc. offers a wide range of reliable solutions. and knowledgeable experts can help design a power solution tailored to a laboratory's specific needs.

## The benefits of optimizing power

Sophisticated instruments require a specific operating voltage for optimal function and to prevent costly damage. Battery backup UPS systems are configured to these specific conditions in power conditioning mode, to ensure instruments are not exposed to improper voltages or power abnormalities, thereby prolonging instrument life. These systems are also equipped with a PDU with multiple receptacles and two simultaneous voltage outputs that match each receptacle type, enabling the system to support multiple devices or instruments.



In addition to damaging valuable equipment, power abnormalities including outages, surges, and voltage inconsistencies bring systems offline and contribute to costly downtime. When such events occur during analysis, valuable samples and data may be lost. A battery backup UPS system isolates the connected instruments from these abnormalities, preventing instrument failure mid-analysis. Backup time may be extended from approximately 10 minutes with a standard unit, to over three hours with additional battery packs, enabling the system to complete a full run during a power outage or electrical disturbance.



Cost is a primary concern for any laboratory, and implementing a UPS system can significantly reduce ongoing utility costs. Designed with energy efficient enhancements, a 6 kVA (kilo-volt-ampere)/6000 Watt system can save close to two thousand dollars in annual electricity costs over older less energy efficient UPS systems, and a 10 kVA/10000 Watt system can save up to three thousand dollars per year. These systems are also designed for simple, intuitive operation, and can be easily unpacked and installed by the user in no more than ten minutes, thereby eliminating additional costs associated with installation and setup. The unit is easily wheeled from the shipping pallet to the desired location in the laboratory, plugged into the wall receptacle, and powered on with a single button on the front LCD display.

## Expert guidance for the best solution

Power conditioners, voltage regulators, and battery backup UPS systems are not one-size-fits-all, and it is essential to ensure the unit is compatible with the instrument. Working with a team of experts makes it easy to select the right system for the laboratory, and does not require extensive technical knowledge.

Plug and play units are designed with the most commonly used receptacles in North America, and are compatible with instruments from several manufacturers. Users simply connect the input power cord to the wall receptacle, and connect the instrument, its peripherals, and computer to the appropriate receptacles on the PDU. Battery Backup Power, Inc. also offers a wide range of solutions pre-matched to an instrument's manufacturer specifications to ensure compatibility, and the team has the technical expertise required to investigate and confirm compatibility with any instruments not listed. This expertise is backed by a compatibility guarantee to ensure the right fit for every laboratory.

Battery Backup Power, Inc. solutions are designed to deliver conditioned, uninterrupted power to sophisticated instruments. These energy efficient systems reduce annual energy costs compared to other UPS systems, prolong instrument life, and prevent downtime (and subsequent sample and data loss) during power outages and other abnormal power events. Intuitive design makes installation quick and easy, and a knowledgeable team can help create a compatible solution for every laboratory.



For more information, visit: https://www.backupbatterypower.com/ Or contact us directly: engineering@batterybackuppower.com (855) 330-7799