

## **Master Power Technologies Introduces Improved Power Management Through Unique Battery Module Management System**

Most companies install power management solutions based on UPS (uninterruptible power supply) technology to ensure they can function at full capacity irrespective of the power supply. UPS systems rely on batteries to control the supply of power to electronic equipment, preventing power disruptions and damage to sensitive electronic components.

“Obtaining the optimal return on your power management investment is all the more important in an era of diminishing budgets,” says Neill Schreiber, Sales and Marketing Manager at Master Power Technologies. “Business can’t afford to rely on utility power and must therefore ensure that its power management solutions deliver the best value over the longest lifespan possible.”

Since every UPS runs off battery power, companies and their power management service providers must ensure batteries are functioning optimally to provide the power required in times of crisis. Poorly maintained batteries are likely to lose their power capacity quite quickly while reducing the useful life of other batteries that need to take up the slack, and therefore the lifespan of the UPS as a whole.

To empower customers to maintain control over their UPS systems and extract full value from them, Master Power Technologies has developed a unique Battery Module Management System (BMMS). The BMMS collects and stores the key electrical parameters (current, voltage and temperature) of each battery and calculates their functional status in comparison to past performance as well as the manufacturer’s specifications.

“The BMMS is designed to continually monitor the status of UPS batteries to ensure they are functioning optimally, warning organisations as soon as one or more batteries are showing signs of a fault before they can damage other cells,” explains Schreiber.

Specific battery monitoring cards are connected to the batteries and each other by Ethernet cable, which provides data and power to each card, so no external power supply is needed. The Universal Controller provides power to all the connected cards and is fed from dual supplies.

“This monitoring function is run continually on each battery,” adds Schreiber. “The battery data is stored by the Universal Controller and updated in a central database. This data logging enables the user to view

battery health/performance trends over any given period. These trends can be monitored on site or remotely via Master power Technologies' Life.NET offsite monitoring system.”

For those responsible for keeping their power solutions running efficiently, real-time data is viewed on site on a 10.1-inch HMI display, which is mounted with the Universal Controller. The interface provides the user with the status of each battery with the current direction and magnitude for each battery bank. Users are notified of alarm events via a selection of gateways, including SNMP, CAN-bus, Modbus TCP/IP (email), relays or SMS (optional).

The BMMS is simple to use and can be installed on any battery-driven devices. The user interface provides an accurate overview of the state of the batteries being monitored and will raise the alarm well before any emergencies can occur. The additional benefit of remote observation allows businesses to have their batteries monitored 24x7 by offsite experts who can initiate any repairs or replacements before problems occur.