

Electrolyte Monitoring Sensor

PBT-BMS-ELS-1

- Electrolyte level monitoring for flooded cells
- Non-intrusive – mounts on outsidel surface of cell
- Senses three discrete levels
- Works in conjunction with battery health sensor
- Alarm reporting via battery sensor and site control unit
- Local LED indication
- Simple plug & play installation
- Small package (approximately 1.1"x2.1")
- Minimal space required; approximately 0.5"
- Lowest cost solution



Electrolyte level sensor works in conjunction with battery monitoring sensor and detects three discrete levels.

The PowerAgent Electrolyte Monitoring System is a breakthrough product that non-intrusively detects and reports changes in flooded cell electrolyte levels.

The system consists of one electrolyte monitoring sensor which is affixed to the exterior wall of each monitored cell. The sensor has two optical level detection transducers. Each transducer can transmit an infrared light beam into the cell wall and measure the intensity of the reflected light. This intensity will change, depending on the presence of electrolyte fluid on the other side of the cell wall. Two level transducers allows the sensor to detect three discrete fluid levels: "Normal", "Warning" or "Low".

The electrolyte sensors are mounted to the cell wall with double sided industrial foam tape (supplied already installed to the sensor). Installation is a simple matter of peeling off the tape backing and affixing the sensor to the cell wall such that the top of the sensor is positioned at the "normal" fluid level. This mounting system is very strong, yet sensors can be removed if necessary. The adhesives used do not react with the battery housing or with the clear plastic shrink-wrap that covers the housing on some types.

The electrolyte sensor communicates with the site controller via the PBT battery sensor, and is also powered by the battery sensor over the interconnection daisy chain.

Each electrolyte sensor has a bi-color LED on its top surface. This LED serves multiple purposes during setup and operation. During normal operation, the electrolyte sensor is in a low-power "sleep" mode and the LED will be off. Every few seconds, the electrolyte sensors are awakened by the battery sensor in order to collect status information. While the electrolyte sensors are awake, the LED provides a local status indication; Green = "Normal", Red/Green flickering = "Warning" and Red = "Low".