

















innovators engineers technologists

## **Intelligent Battery Monitor**

Originally designed to measure and log the current taken from a nonrechargeable battery pack in a safetycritical application, the intelligent battery monitor allows the remaining capacity to be accurately estimated and can be adapted to work with most battery technologies.

When using expensive, but high performance non-rechargeable battery technology such as LiSOCL2 it is not always easy to track the usage and therefore, the remaining capacity of the batteries can be indeterminable.

Whether using rechargeable or non-rechargeable technology, in applications where the remaining capacity is critical, this can result in batteries that have a good capacity being replaced unnecessarily, at great expense, or alternatively running the risk of having insufficient capacity when needed.

## **Key Features**

- Monitors voltage, current and temperature of the batteries
- Calculates used and remaining capacity, compensating for temperature and time, according to battery characteristics
- Maintains a record of remaining capacity in memory
- Outputs status message on demand including current, voltage, temperature, Ah Consumed and Ah remaining
- RS485 interface, addressable for multiple boards
- Powered from main battery (being monitored) or a separate supply
- Input for leak detection (could be adapted to other inputs)
- Internal firmware and battery characteristics field updatable
- LiSOCL2 and lead acid (rechargeable) variants available
- Can be adapted to any battery technology with known charge and discharge characteristics
- 10 cm x 12cm custom/smaller sizes available to order

Defence Research • Naval Systems • Aerospace • Sonar & Acoustics • Military Vehicles

