



COST SAVINGS

BATTERY MONITORING SYSTEM

for motive power and standby applications

RELIABILITY

QUALITY

Save on maintenance and operation costs.

Increase reliability and quality of your operation and extend the lifetime of your battery!



The ABERTAX BMS is our entry level Battery Monitoring System, equipped with highly visible LEDs and includes our patented battery analysis algorithms that provide an edge over competing products in the market.

The BMS is designed to withstand the harsh electrical, mechanical and chemical environments present on flooded batteries. The technology and algorithms employed are the result of extensive research work in all the above engineering fields.

The BMS will collect and process data from your batteries, allowing you to monitor and control the way these are being used, thus increasing their service life to give you the maximum return on your investment. The device will monitor the full pack voltage, the half pack voltage, ambient and battery temperatures and battery liquid level. Intelligent algorithms estimate the remaining cycle life based on a history of battery condition events. The BMS will also monitor the number of charge and discharge cycles as well as the temperature, low acid level and deep discharge events and duration.

The data stored on the device can be retrieved using our USB adapter, via an acid-proof connector to be processed by our proprietary software with advanced reporting capabilities.

On-site, harmful battery conditions will raise immediate alarms via three highly visible LEDs on the device, specifically high temperatures, cell voltage imbalances and a low liquid level.

The BMS is designed to operate up to a maximum nominal battery voltage of 80V. Multi-stage electronic protection ensures that the BMS performs safely and reliably while also withstanding over-voltage, over-current and reverse polarity conditions. All inputs are individually protected, and are designed to recover immediately and resume operation once the fault is removed. Furthermore, additional fuses protect against extreme conditions.



PRODUCT FEATURES

- Patented electrolyte level sensing technology that eliminates electrolytic corrosion between the probe and cell plates
- Full battery pack and half battery pack voltage sensors, dual temperature sensor, and level sensor
- Log of major events and alerts
- Remaining cycles estimation algorithms
- USB communication
- Quick and easy installation by qualified service personnel
- Rugged fully-encapsulated enclosure
- Robust protection against voltage & current transients and reverse polarity connection
- Protected against electromagnetic interference
- Patented connector designed for Bolted battery terminals, other connectors for Welded type also available.

WHY USE THE ABERTAX® BMS?

1. **SAFETY** Robust construction, free of any potential danger to the battery and safe against any high inrush current, or high voltage transients.
2. **RELIABILITY** The BMS is not susceptible to corrosion on the probe and does not cause corrosion on the battery plates. Level probe with Gauge Guard prevents the probe from touching the separators. Encapsulated dual ambient and battery temperature sensor probe.
3. **EXTENDED BATTERY LIFE** The level probe means watering intervals can be extended for substantial savings from reduced service intervals. Alerts and estimations inside clear reports allow you to further maximize the battery life by observing and correcting adverse usage conditions.
4. **EASY ASSEMBLY** The patented connectors fit & seal perfectly on the bolted terminals. No additional parts and handling required.
5. **HIGHLY VISIBLE** Bright LEDs ensure a highly visible and reliable indication at all times.
6. **VARIOUS OPTIONS** A large selection of optional features to meet different customers needs.

If these are all essential requirements for you, then the only choice is the ABERTAX® BMS.



BATTERY STATUS REPORT

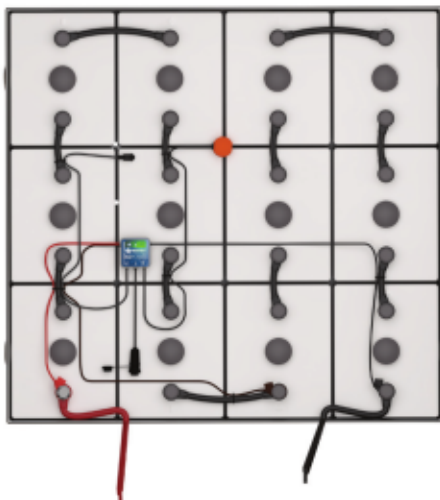
The Battery Status Report provides a concise display of all battery usage information, including all battery events and the estimated remaining cycles.

The screenshots show the following data:

- Estimated Battery Status (2017-08-16):** 528 cycles, 52.8% remaining. Legend: Used Cycles (blue), Remaining Cycles (green), Lost Cycles (red).
- Cumulative Status Report (2017-08-16):**
 - Charge Events:** Intermediate: 42, Incomplete: 86, Full: 400 (2829 Hrs)
 - Discharge Events:** < 1.96 V: 142 (1027 Hrs), < 1.9 V: 41 (267 Hrs), < 1.84 V: 13 (45 Hrs)
 - Deep Discharge Events:** > 1 Hour: 1, > 24 Hours: 1, > 72 Hours: 0
 - Voltage Imbalance Events:** > 200 mV: 30 (111 Hrs)
 - Temperature:** > 45°C: 24 (257 Hrs), > 55°C: 6 (20 Hrs), > 65°C: 1 (0 Hrs)
 - Acid Level:** > 24 Hours: 5, > 96 Hours: 1, > 240 Hours: 1
- Status Report - 2017-08-16 • Battery 1:**
 - Battery Statistics:** 24 V 620 Ah Flooded Abertax, On Time: 18916 Hours, Disconnected Time: 0 Hours, Cycle Life (EN): 1000, Charge Cycles: 528
 - Operation Conditions • Events:**
 - Charge Events (528):** Full: 400, Incomplete: 86, Intermediate: 42
 - Discharge:** < 1.96 V: 142 (1027 Hrs), < 1.9 V: 41 (267 Hrs), < 1.84 V: 13 (45 Hrs). 7.1% of On Time.
 - Deep Discharge:** > 1 Hour: 1, > 24 Hours: 1, > 72 Hours: 0. 0.1% of On Time.
 - Half Voltage Imbalance:** > 200 mV: 30 (111 Hrs). 0.6% of On Time.
 - Over Temperature:** > 45°C: 24 (257 Hrs), > 55°C: 6 (20 Hrs), > 65°C: 1 (0 Hrs). 1.5% of On Time.
 - Low Acid Level:** > 24 Hours: 5, > 96 Hours: 1, > 240 Hours: 1. 2.4% of On Time.

EASY TO INSTALL

The ABERTAX BMS is easy to install and is available for battery voltages ranging from 12V to 80V.



TECHNICAL SPECIFICATIONS

Nominal Supply Voltage:	12V – 80V
Max. Operating Volt. (80VDC nom.):	120VDC
Min. Operating Volt. (12VDC nom.):	10VDC
Current Consumption @ 24VDC:	<20mA
Operational Temp. Range:	-30°C to +70°C
Protection Class:	IP65
Approx. Weight (Standard Type) approx.:	103g
Diameter Level Probe (Including Seal):	5mm
Diameter Hole for Gauge Guard:	10mm
Dim. Temp. - Sensor Housing approx. (excluding probe):	30mm diameter, 20mm height

ABERTAX® TECHNOLOGIES
Leaders in Battery Ancillaries

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