



BATTERY ACCESSORIES

ABERTAX® BMS SOLUTIONS



ONE SYSTEM FOR ALL APPLICATIONS

BATTERIES

- Lead acid
- Lithium
- NiCd

MOTIVE POWER APPLICATIONS

- Fleet operation
- Single vehicle/battery control
- Charging station management
- Energy management
- Operation control/management



COMMUNICATION

- USB
- Bluetooth
- GPRS
- WIFI
- ETHERNET
- CANBUS
- Vehicle
- Charger
- Appliances
- Inverter

ENERGY STORAGE SOLAR APPLICATIONS

- Solar battery control/management
- Energy storage management
- Stand by battery control
- Energy management

ADVANTAGES

- Highest accuracy current sensor
- Multiple current sensor possible
- Flexible current sensor: the current sensor connects to the device via a cable making it easy to position.
- Reduced dimensions: Just 130mm x 45mm x 24mm
- Both Full and Half voltage measurements enable quick identification of imbalanced cells.
- Dual temperature sensors: Both ambient and internal cell temperature
- Mobile (upload via GPRS) or Local (RF/LAN) data upload options

PRODUCT AND SAFETY FEATURES

- Quick and easy installation, even by untrained personnel familiar with servicing and/or use of batteries
- Does not require physical intervention to retrieve data
- Wide operational voltage range (24-120V)
- Optional current measurement using Hall Effect Sensor
- Two voltage input; string and half voltage
- Temperature measurements (optional electrolyte temperature)
- Electrolyte level sensing with patented ABERTAX® CLS
- Mobile Version: Uploading of logged data to server via GPRS
- Local Version: Uploading of logged data to server via RF/LAN
- RF communication with other nearby modules & sensors
- Multiple means of communication (GPRS, RF, LAN, WiFi, CAN)

BMS (Offline Solution)



- > 1 batteries / location
- Data logging during Battery Service
- Acid Level
- Utilization Information
- Warranty

e²BMS Local (RF/LAN Transmission)



- > 10 batteries / location
- Data logging between Service interval
- Remote access
- Fleet Management
- Charging Management
- Financial Management
- Acid Level
- Utilization Information
- Warranty

e²BMS Mobile (GPRS Transmission)

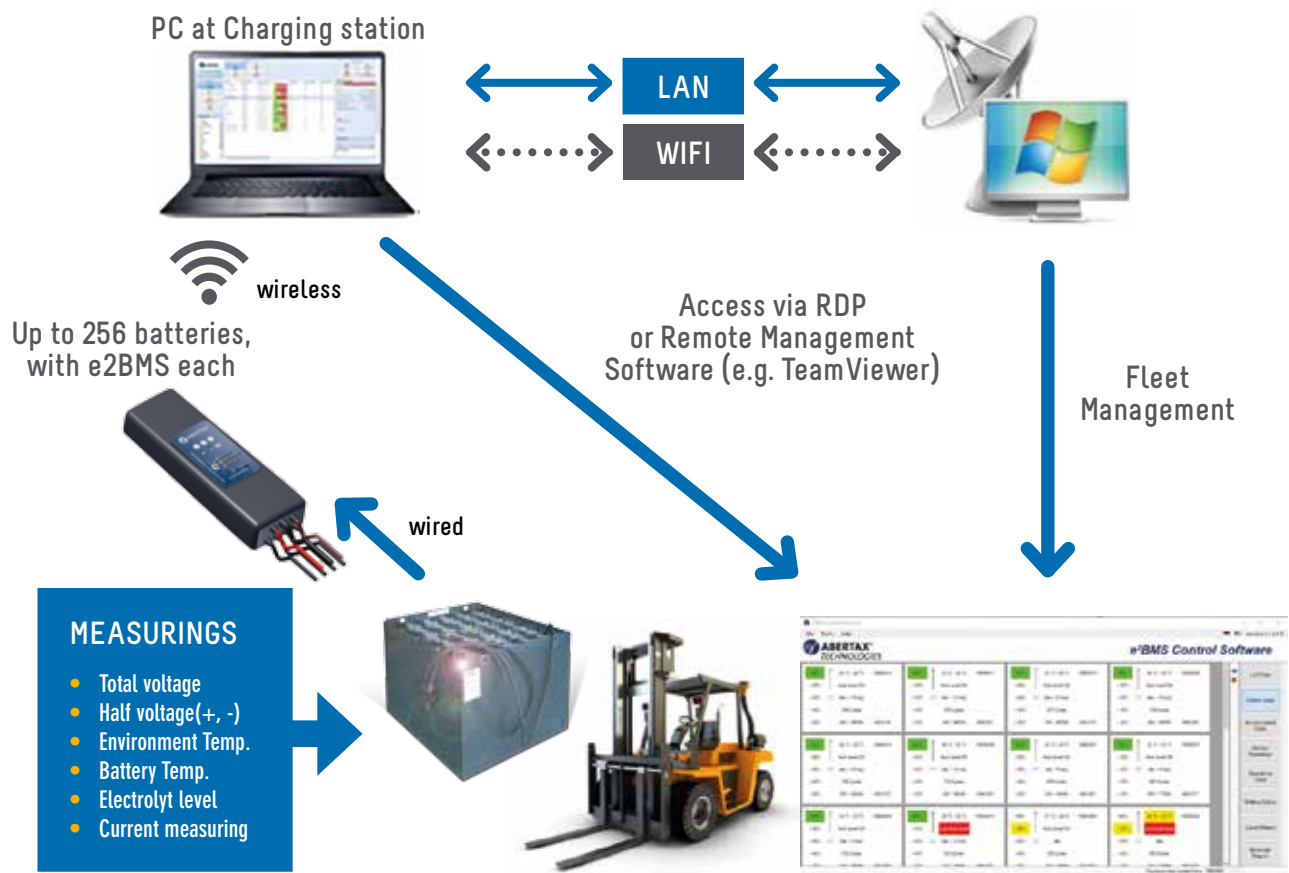


- > 1 batteries / location
- Data logging between Service interval
- Rental application
- Remote access
- Fleet Management
- Charging Management
- Financial Management
- Acid Level
- Utilization Information
- Warranty

ADDITIONAL FEATURES AND OPTIONS

- Collection, storage and calculation of all battery parameters
- Immediate warning / alarm message via SMS, email
- All alarm parameters are configurable (via internet connection)
- Data retrieval at any time from anywhere (via Internet connection)
- Firmware changes via Internet (Online Version)
- Data accessed via any browser (IE, Firefox, etc.) via PC, laptop, smartphone, tablet, etc. (requires Internet connection)
- Mobile Version: No software installation required (Data retrieved via web browser)
- Readout on site via RF
- Portable programmable access levels (with Internet connection)
- Integrated RF transeiver - communication with vehicle, charger, etc. possible

USAGE ON CHARGING STATION



Battery ID	Type	Date of Installation	Used Cycles	Remaining Cycles	Charge Time	Operation Time	Idle Time	Starting Date	End Date	Ah Charge	Discharge Kwh	Deep Discharges	Low Electrolyte	Overtemperatures	Data Storage	Battery Report	Energy In/Out
B001	AGM	2015-01-01	100	500	12h	8h	16h	2015-01-01	2015-01-01	100Ah	10kWh	0	0	0	1000	Green	1000kWh
B002	AGM	2015-01-01	100	500	12h	8h	16h	2015-01-01	2015-01-01	100Ah	10kWh	0	0	0	1000	Green	1000kWh
B003	AGM	2015-01-01	100	500	12h	8h	16h	2015-01-01	2015-01-01	100Ah	10kWh	0	0	0	1000	Green	1000kWh

FULL AND DETAILED DISPLAY OF BATTERY DATA

- Battery information (battery number, type, date of installation, etc)
- Used and remaining cycles
- Charge, operation and idle time (total time and with current flow)
- Starting date and end cycle
- Ah charge - discharge with discharge Kwh (hall sensor)
- Number of deep discharges and duration
- Number of low electrolyte level and duration
- Number of overtemperatures and duration
- Data storage device with sequence data
- Battery report with battery status indicator (traffic light system and prognosis)
- Calculation of energy in and out of the battery