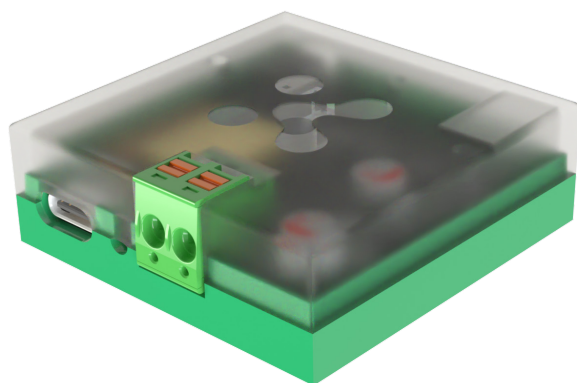


BatteryButtonX

Modular wired/wireless sensor system



Lead-acid batteries are the backbone of critical backup power systems. However, in most multi-battery UPS installations, batteries operate mostly in series configuration. BatteryButtonX is a modular sensor system enabling full transparency down to each battery in a string.

Keyfeatures

- Cell-level voltage and temperature measurement
- Bluetooth Low Energy (BLE) sensor network / Modbus RTU
- Room-level gateways for data aggregation
- BLE to MQTT protocol conversion via Gateway
- Central Linux-based server with MQTT broker
- Cell impedance calculation (battery current provided by UPS)
- Quick installation on each battery

SPECIFICATION

Model Name	BBX
Voltage Measurement	Measurement resolution: 12 bit 2 V version: accuracy < 2 mV 12 V version: accuracy < 10 mV
Temperature Measurement	Battery temperature monitoring, Accuracy: $\pm 0.5^{\circ}\text{C}$
Power Consumption	Average power consumption: < 50 mW per BMS Button
Dimensions (mm) W×H	50 x 50
Weight	50 g
Operating Temperature	-10° C to 50° C, 10% ~ 90% RH Non-Condensing
Certification	CE
Features	
Local Status Indicator	Status indication on the BMS Button via red/green indicator.
Battery Electrolyte Level Monitoring (Optional)	Digital input for monitoring the battery electrolyte level.
Charge Cycle Data Storage	Local storage of charge cycle data for up to 10 years. Stored data can be read directly via USB from the BMS Button, independently of the overall system.

Communication & Interfaces

BLE Version	Communication: Bluetooth Low Energy (BLE) Data interface (Gateway): MQTT
Wired Version	Communication: Modbus RTU (Modular Jack: RJ10)
Interfaces/ access options	InfluxDB API / Web GUI / MQTT

Ordering Information / Versions

BMS BB 2V BLE
BMS BB 2V Wire
BMS BB 12V BLE
BMS BB 12V Wire