

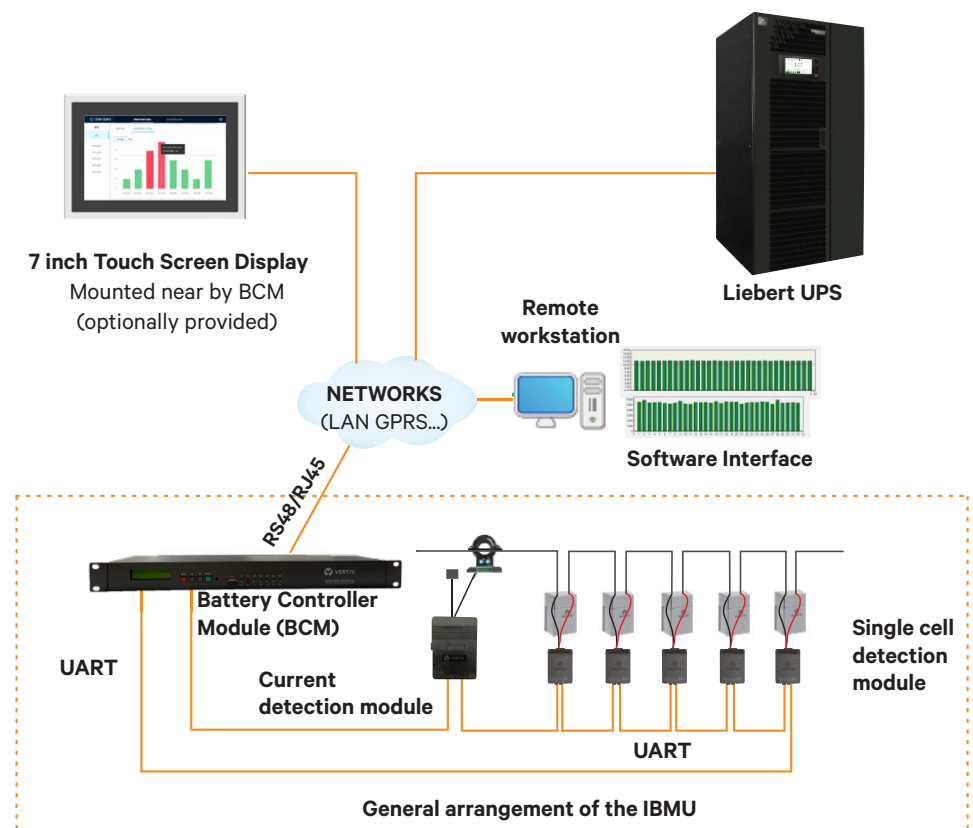
Key Features

- Modular design, easy to install & manage.
- Manages up to 960 batteries per six number of battery strings for a single battery controller module
- Supports 2V, 6V, 12V leadacid batteries.
- Monitors the real-time data of cell internal resistance and temperature which will detect battery capacity changes in time & avoid thermal runaway risks.
- Locate the faulty battery blocks.
- Aid to achieve the highest UPS uptime.
- User configurable alarm flags.
- SNMP/Modbus communication protocols for remote monitoring.
- Can be monitored & managed via UPS display.

The battery is a critical element in protecting your critical IT infrastructure. A single bad battery within your back-up power system can potentially induce a risk of downtime for your mission-critical load operations. Leading number of statistics indicated that more than half of all the UPS failure instigated due to battery failure. Inevitably, this call for an intelligent and reliable diagnostic system that can track and help improve the battery performance in real-time basis.

Introducing the **IBMU**, an Intelligent Battery Monitoring Unit designed to optimize the battery performance and improve reliability without placing your critical operations in jeopardy due to potentially deteriorated cell. The IBMU monitors real-time operating status of each cell voltage, cell internal resistance & temperature, charging & discharging current, ripple voltage, and hydrogen concentration.

Embedded with the comprehensive acquisition & management tools, the IBMU locate the battery malfunctions very accurately. Additionally, IBMU display parameters can be interlinked with the display of Liebert Power system. Thus simplifies the management of complete power system.



Technical Specifications

Battery Controller Module

Operating Voltage	85 ~ 264VAC, DC 110 ~ 370V (standard); DC48V (optional)
Power Consumption	<15W
Working temperature	-10°C ~ +50°C
Working humidity	5% ~ 95%
Communication interface	RS 485 and 10/100M network port, support MODBUS/RTU, MODBUS/TCP and SNMP protocol
Man-machine interface	5.6-inch touch screen, LED status display and buzzer alarm
Installation method	Wall mounted, 19inch rack

Single Cell Detection Module

Operating Voltage	2V module: 1.500V ~ 2.500V ±0.1% 6V module: 4.500V ~ 8.000V ±0.1% 12V module: 9.000V ~ 15.000V ±0.1%
Working temperature	-10°C ~ +55°C
Internal resistance detection range	50 ~ 65535uΩ, ± 2%
Temperature detection range	-5°C ~ +99.9°C, ±1°C
Installation method	Installed on the surface of the battery or battery holder

Current Detection Module

Operating voltage	DC 8 ~ 13V (main control module power supply)
Power consumption	<0.15W
Working temperature	-10°C ~ +55°C
Current detection range	BM-TC500: 0 ~ 1000A BM-TC1000: 0 ~ 2000A
Current detection accuracy	0 ~ 1000A, ± 1% (FS)
Installation method	Installed on the surface of the battery or battery holder

Component Description	Dimensions (DxWxH in mm)	Weight (g)
Main control module	<=116×430×44.5 (standard 1U)	<=1800
Single cell detection module	<=28×61×85	<=80
Current detection module	<=29×60×85	<=75



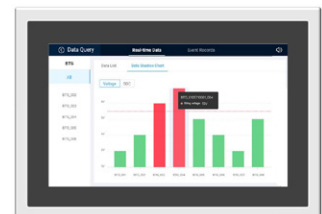
Remote workstation



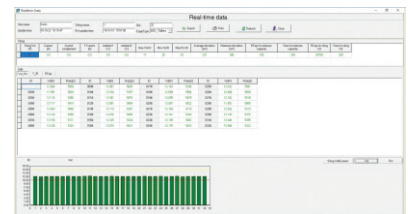
Single Cell Detection Module



Current Detection Module



7 inch Touch Screen Display (optional)



Software Interface