

Sentry 2402W2 is a powerful battery monitoring system for Telecom -48V system with 2V cells up to 3,000Ah capacity. This compact battery unit combines superior data quality and flexible installation to address most cell site, central office and substation applications for effective remote battery management according to the IEEE updated standards:

IEEE Std. 1188 - 2005: Recommended Practice for Maintenance, Testing, and Replacement of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications ([IEEE Link](#))

IEEE Std. 450 - 2010: Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications ([IEEE Link](#))



Front Panel

- Current Sensor
- Ambient Temperature
- Pilot Temperature
- RS232 and RS485
- Service Alarm
- Urgent Alarm
- Digital Input
- Ethernet with embedded web



Rear Panel

- 2-wire mode
- Cell Voltage
- Internal Resistance
- Connection Resistance for each cell



Main Features

- Super precise IR (Internal Resistance) measurement for each cell
- Discriminate inter-cell resistance measurement
- 16-bit high resolution data acquisition
- No mechanical relays, resulting high reliability for telecom applications
- Industry standard Modbus/RTU communication for high reliability and quick integration
- Compact design allows for easy installation on the top or inside of the battery cabinet.
- Industrial grade reliable connections
- Plug and play HMI panel (optional)
- Full support to networking battery management system
- Compatible with MyBattery Platform™ for web based remote monitoring.
- Ambient and Pilot Battery Temperature Monitoring



Specifications

Power Supply	
Power Input	Internal DC/DC converter, 36-60V input; Maximum Consumption: 10W
Isolation	500VDC@1min to battery string
Current/Temperature Measurement	
Current Sensor (Optional)	Support LEM HAS current sensor with internal +/-12V power supply (Default range +/- 400A, window size 20mmx10mm)
Accuracy	0.1% + sensor accuracy
Integrated Current Measurement	0.1A resolution (Field calibration is required.)
Temperature Sensors	1 ambient temperature sensor, 1 pilot temperature sensor
Range	Measurement range: -40 to 65°C
Accuracy	1 °C
Voltage Measurement	
Battery	24 x2V cell, up to 3,000Ah
Bus Voltage	Range: 36 – 60V; Accuracy: 0.1%
Input Range to Each Channel	+/- 3V for 2V batteries
Accuracy	0.1%
Input Wiring	2-wire differential input for each battery
Internal Resistance	
Range and Resolution	0 to 3mΩ, 0.001 mΩ resolution
2-wire mode	Internal Resistance and discriminate Connection Resistance.
Communication	
Serial Port	Isolated RS-232C and RS-485 interface
Protocol and Serial Settings	MODBUS RTU, 9600-8-1-None
Modbus address	1 to 28, configurable with HMI
Ethernet	Onboard Ethernet DTU to MyBattery Platform™
Indication and Alarm	
LED indication	<ul style="list-style-type: none"> ▪ Dual-color LEDs for status ▪ Orange LED for service alarm ▪ Red LED for urgent alarm
Alarm Outputs	Service Alarm (Normal Close, 0.1A capacity) Urgent Alarm (Normal Close, 0.1A capacity)

***Specifications subject to change without notice**

7309 York Road
Towson, MD 21204
United States

TEL +1 410-337-5233
FAX +1 484-687-9904
info@batterydaq.com
www.batterydaq.com

