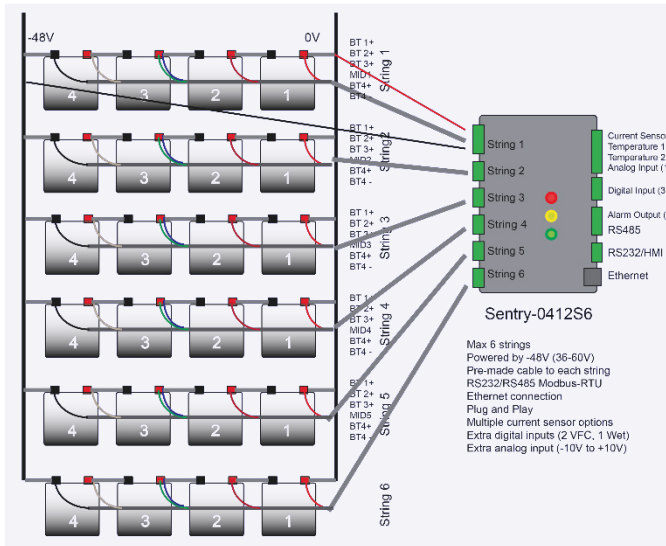


Sentry series compact battery monitors combine superior data quality and flexible installation to address cell site applications. Compatible with Master-800 dashboard, MyBattery Platform™ or other remote site management system with standard Modbus communication, Sentry monitors can be utilized for virtually every remote telecom application.

Sentry-S6 is specifically designed for 48V systems with up to 6 strings of 4x12V in parallel which are popular in telecom sites.



- **Advanced DC Technology.** Precise IR (Internal Resistance) measurement is performed on each battery.
- **No Noise/Interference to Power System.** No need for high current discharge during internal resistance measurement
- **High Resolution.** 16 bit high resolution provides for clear and precise data acquisition
- **Solid State Scanning.** (rather than mechanical relay) provides the highest reliability for telecom site and industrial applications
- **Modbus RTU Communication.** Provides high reliability and ease of integration
- **Compact Design.** Permits convenient installation on top, or inside of the battery cabinet/rack
- **Access Data/Alarm from Anywhere.** Firewall friendly design, plug and play, easy to manage large number of sites from anywhere via internet
- **HMI Panel.** The plug and play touch panel (optional) allows the technician to configure and calibrate without the need of a PC
- **Supports Site/Building Management Systems.** The system fully supports 3rd party network battery management systems with Modbus-TCP and hyperlink to real-time data



Key Features

Model	Sentry-S6
Battery System	Optimized for telecom 48V system with 12V batteries 4x12V, up to 6 strings (For 1 or 2 strings, please select Sentry-S2 or Sentry-NB8)
Power Supply	Powered by battery bank BUS, not by individual battery
String Voltage	Continuous monitoring with High/Low float charge voltage threshold and discharge Low setting
Current	Compatible with closed core and split core CT for easy installation to multiple battery cables. Reliable thermal runaway detection with current and temperature inputs.
Ambient/Pilot temperature	1 sensor for ambient Multiple pilot points, 1 sensor for each string
Individual battery voltage	Flexible interval to report data, high/low threshold for floating and discharge
Internal Resistance	Advanced DC technology to achieve unsurpassed IR precision.
SOH, SOC, Runtime	Proprietary onboard analysis for SOH, SOC and Runtime
Enclosure	Compact aluminum, mounts on battery rack or on top on battery bank
Harness and installation	Simplified wiring design for easy installation Pre-made/customized harness for quick installation enables large scale deployment Portable touch screen for onsite validation
Battery discharge capture	High resolution capture, no limit to time lapse, no limit to onboard memory size. Online access to discharge curve for every battery (with MyBattery Platform™)
Network	Instant drop-in, minimum field configuration. Optional cellular IoT technology
MyBattery Platform™ capacity	Cloud based parallel computing No limit, validated with >10,000 sites
Integration	Standard Modbus RTU and Modbus TCP protocols. SMS, email alarm delivery.
Dashboard	Compatible with Master-800 Dashboard to manage 1,000 sites in private network



Specifications

Battery System	48V battery system (36 ~ 60V range) 4x12V per string, up to 6 strings in one DC system
Power Supply	Internal power converter. Maximum Consumption: 6W
Isolation	500VDC@1min to battery string
Current Sensor	Support LEM current sensor with internal +/-12V power supply. CT options: CT-Y5-300A, split core, +/-450A, window size 16mmx64mm CT-CK-300A, close core, +/-450A, window size D-35mm
Accuracy	0.1% + sensor accuracy
Temperature	1 ambient temperature sensor, 1 to 6 pilot temperature sensors
Temperature Range	Measurement range: -40 to 65°C, 1 °C accuracy
Bus Voltage	Range: 0 – 60V; Accuracy: 0.1%
Battery Voltage	+/- 16V for 12V batteries; Accuracy: 0.1%
Internal Resistance	0 to 30mΩ, 0.01 mΩ resolution
SOH	Reliable State-of-Health estimation with self-calibration
SOC	Realtime State-of-Charge calculation
Runtime	Realtime runtime estimation (display in minutes)
Thermal Runaway	Reliable thermal runaway detection with thermal risk calculation
Serial Port	Isolated RS-232C and RS-485 interface, MODBUS RTU, 9600-8-1-None
Modbus address	1 to 28, configurable with HMI
Ethernet	Onboard Ethernet LAN connection to Battery Analyzer, Master-800 Dashboard or MyBattery Platform™ Integration Support: Modbus TCP, email/SMS message, hyperlink to real-time data
Wireless Option	Plug and play IoT cellular adapter (optional)
LED indication	Dual-color LEDs for status
Alarm Outputs	Service Alarm (Normal Close, Voltage-free, 60V 0.1A capacity) Urgent Alarm (Normal Close, Voltage-free, 60V 0.1A capacity)
Dimension	165W*31H*165L(mm) (Mounting bracket excluded)
Mounting	Magnetic cup (default), DIN rail or customized bracket

***Specifications subject to change without notice**

IEEE standard reference:

IEEE-1188, IEEE Recommended Practice for Maintenance, Testing, and Replacement of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications

IEEE 1491-2012 IEEE Guide for Selection and Use of Battery Monitoring Equipment in Stationary Applications

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