



## BDS-Pro Battery Monitoring System

Model # BDS-Pro



Eagle Eye's **BDS-Pro Battery Monitoring System** is designed to measure the aging status of up to 24 jars (or 24 cells) by measuring and recording: string voltage and current, as well as jar/cell voltage, internal resistance, connection resistance and temperature. The BDS-Pro Battery Monitoring Solution is the most accurate, user-friendly and economic solution for monitoring 24 jars (or 24 cells) systems using 1.0-16V batteries. Although the BDS-Pro is utilized in many industries, it is most frequently used in 24 cell, 48Vdc applications.



Battery failure can happen overnight, and Eagle Eye's IBwatch-Series real-time battery monitoring allows full protection and confidence against such failures. Ohmic resistance and voltage measurements (per jar) are taken as often as every five minutes. String current, DC voltage, and temperature are measured in real-time. These measured parameters will provide the user a real-time

understanding of their batteries state-of-health.

The BDS-Pro Battery Monitoring System comes complete with Eagle Eye's Centroid Battery Management Software package which allows all battery systems to be monitored 24 hours a day, 365 days a year via a remote computer. Centroid provides real-time battery monitoring and string/cell trending with reporting capabilities. String trending reports provide system resistance, voltage, temperature, and voltage/ohms comparison. Cell trending reports provide battery/connection resistance, voltage, and temperature. Custom alarm settings can be configured per string.

### The BDS-Pro Battery Monitoring System Includes:

- BDS-Pro MPU Body
- Clamps: O-Type for cable connection or C-Type for bus-bar connection
- Sensing cable (current line)
- Signal cable (voltage line)
- Temperature cable
- Total voltage current cable
- LAN cable (if necessary)
- Control power cable
- Centroid Battery Management Software
- User Manual

Reduce maintenance costs, improve up-time and manage your battery assets effectively by using the BDS-Pro battery monitoring solution for your system. Traditional battery testing and battery monitoring methods perform the most crucial test - ohmic value - periodically. Eagle Eye’s battery monitoring systems can monitor the ohmic value of all your jars (cells) multiple times each day, due to the fact our systems inject a minimal, non-intrusive current. Protect yourself from battery failures - one of the leading causes of facility downtime, with the BDS-Pro Battery Monitoring System.

If you are testing a larger system see Eagle Eye’s **iPQMS Battery Monitoring System** which can monitor up to 448 jars (or 448 cells), and offers the same protection and reliability as the BDS-Pro Battery Monitoring System.

Technical Specifications	Advantages	Applications
<b>Technical Specifications</b>		
<b>Battery Types:</b>	VLA (Vented Lead Acid/Wet Cell), VRLA (Valve Regulated Lead Acid), NiCad (Nickel Cadmium), & Others	
<b>Measurement Range:</b>	Battery Capacity: 5 – 6,000 Ah Jar/Cell Voltage: 1 – 16 VDC DC Voltage/Current: ~ 999.9 VDC/~999.9 A	
<b>Accuracy:</b>	DC Voltage / Current: ±0.5% / ±1% Temperature: ±2% Internal Resistance: ±2% Cell Voltage: ±1%	
<b>Resolution:</b>	AC Voltage / Current: 0.1 V / 0.1 A DC Voltage / Current: 0.1 V / 0.1 A Cell Voltage: 10 mV Internal Resistance: 0.001 mΩ Temperature: 0.5 °C	
<b>Test Speed:</b>	3 – 4 seconds per cell	
<b>Test Load:</b>	Less than 2 A per cell	
<b>Measuring</b>	Adjustable from 5 min to 24 hours (voltage &	

<b>Interval:</b>	resistance)
<b>Data Transfer:</b>	TCP/IP, SMS, MODBUS
<b>Bandwidth Use:</b>	Less than 3 Kbps ( <u>Kilobit per second</u> ) peak
<b>Connections:</b>	Ethernet, RS-232, RS-485
<b>Operating Environment:</b>	Temperature: 0 – 65 °C (32 – 150 °F) Relative Humidity: Under 80%
<b>Power Requirements:</b>	46 VDC (from connected batteries) AC Optional

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