



iPQMS-Pro UPS Battery Monitoring System

Model # iPQMS-Pro



Eagle Eye's **iPQMS-Pro UPS Battery Monitoring System** is a scalable system designed to monitor the health of critical battery systems by measuring: string voltage and current, jar/cell voltage and impedance, connection resistance, and temperature.

A non-intrusive system, the iPQMS-Pro measures critical battery parameters via clamps connected to the inter-cell connections of the battery system. A single system includes an MPU (Main Processing Unit) and all required cables and clamps for installation. One MPU can connect to (48) cells, however up to ten MPU's can be configured in daisy-chain for monitoring of up to (480) cells.

Measured data is communicated via TCP/IP or

RS232 back to the included Centroid Snet Battery Management Software.

The iPQMS-Pro records, trends, and report data against user-defined tolerances. In the event that a measured parameter is out of tolerance, an outbreak alarm will occur in the software and email/SMS alerts will be generated. The iPQMS-Pro is an ideal solution for monitoring and predicting the health and performance of UPS Cabinets, Telecom Systems, and other backup power systems.

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. Battery failure can happen anytime and monitoring is necessary for every mission-critical facility, including financial institutions, hospitals, schools & universities, and other public and consumer facilities. Immediate warnings of battery deterioration and failure will prolong the life of your UPS batteries and reduce the need for costly battery maintenance and replacement.

The iPQMS-Pro Battery Monitoring System Includes:

- iPQMS-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 probes
- CT Clamp
- Control power cable
- Centroid Battery Management Software
- BMS Analyzer Utility Software
- User Manual

Before installation of the iPQMS-Pro, Eagle Eye will send you an IBwatch-Series Site Survey Form. This site survey form allows us to customize your iPQMS-Pro battery monitoring system based on your batteries, network, and battery site.

The iPQMS-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.

Reduce maintenance costs, improve up-time and manage battery assets effectively by using the iPQMS-Pro battery monitoring solution. Real-time battery monitoring protects the user from costly downtime, data loss, and security risks. Real-time battery monitoring also reduces maintenance and replacement costs by maximizing battery life.

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 iPQMS-Pro Battery Monitoring System.

Technical Specifications	Advantages	Applications
Technical Specifications		
Measurement Range:	Battery Capacity: 10 – 6,000 Ah Jar/Cell Voltage: 0.1 – 16 VDC String DC Voltage: 0 – 900 VDC DC Current: 0 – 300 Amps Internal Resistance: 0.001 – 99.99 mΩ	
Accuracy:	DC Voltage / Current: ±0.5% / ±1% Temperature: ±2% Internal Resistance: ±2% Cell Voltage: ±1%	
Resolution:	DC Voltage / Current: 0.1 V / 0.1 Amps Cell Voltage: 10 mV Internal Resistance: 0.001 mΩ Temperature 0.1°C	
Test Speed:	2 seconds per Jar/Cell	
Test Load:	Less than 2 Amps per Jar/Cell	
Measuring	Adjustable from 4 minutes to once per day (Voltage &	

Interval:	Resistance)
Data Transfer:	TCP/IP, RS-232
Bandwidth Use:	Less than 3 Kbps peak
Display:	Status LED
Operating Environment:	Temperature: 0 – 65 °C (32 – 150 °F) Relative Humidity: Under 80%
Power Requirements:	DC: 40 – 60 VDC AC: 100 – 240 VAC
Dimensions:	370 x 230 x 60 mm (14.6 x 9 x 2.4 in)
Weight:	3.1 kg (6.8 lbs)

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