

Cellwatch is a state of the art family of battery monitoring solutions that help prevent unplanned outages on critical power backup systems. Cellwatch was a pioneer in its ability to monitor batteries every day, now regarded as an essential requirement on critical UPS and power protection applications.



 **CELLWATCH**

Battery Monitoring Systems

CELLWATCH

Daily Battery Monitoring

Traditional battery monitoring systems perform the most crucial test – ohmic value – once a week or once a month. Knowing that a battery can fail in as little as two days, it is essential that your system be able to monitor your batteries every day. Cellwatch has been specifically designed to monitor the ohmic value of all the jars every day. As we say – “If it isn’t every day, it isn’t battery monitoring.”

Modular Design

Cellwatch is the only battery monitoring system that can monitor different jar voltages or different types of batteries (like generator batteries) on the same system. Consisting of just three main components, the Intelligent Battery Monitoring Unit (iBMU), the Control Unit (CU), and the Data Collection Modules (DCM), Cellwatch is the easiest battery monitoring system to install, maintain, and expand. Each DCM automatically adjusts to 2, 4, 6, 8, 12, and 16 volt jars greatly simplifying installation and commissioning of the system.

Scalable System

Whether you are adding a string, a room, or a building, the Cellwatch system is truly scalable. Even the best laid plans sometimes get changed over time as the needs of your data center change. With only three major components, expanding your system is as simple as adding the appropriate number of components. No rewiring is required and the components can even be refitted to a change in architecture. Extending your system to cover your auxiliary batteries, like your generator batteries, is accomplished in the same way.

Our Track Record

For the last twelve years NDSL has been making the finest battery monitoring system in the world. We pride ourselves on the concept of “making complex things simple” and making sure that our 3rd generation product is compatible with the generations before it. Major financial institutions and data center operators around the globe rely on Cellwatch to protect them from unexpected failure of their batteries.



*If it isn't everyday,
it isn't battery monitoring.*

BATTERY FACTS

Over 75% of UPS failures can be attributed to a battery failure (Including generator start batteries).

Up to 5% of batteries fail during the warranty period.

Any string of batteries is only as good as its weakest cell.

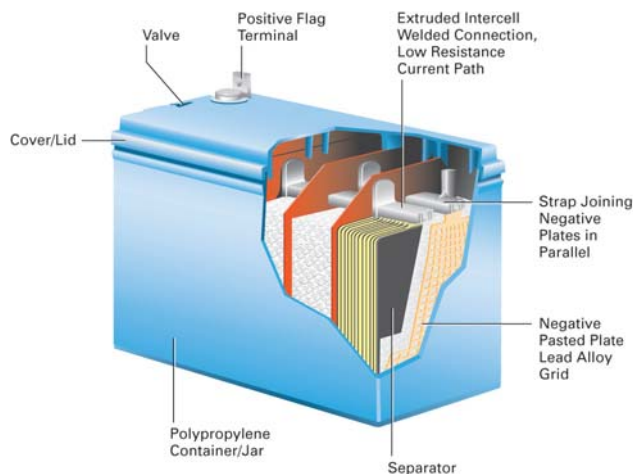
Batteries typically fail in one to two weeks and in as little as two days.

Quarterly maintenance is totally inadequate in critical installations.

A failing battery puts additional strain on the remaining "good" batteries.

"Ten Year" batteries have a service life between four to six years.

Batteries near end-of-life have lost 20% of their original load capacity and 50% of their original runtime.



Internal and external components of a valve-regulated lead acid (VRLA) battery.

Here's a simple truth: the UPS draws its power from banks of lead acid batteries, and those batteries can go from good to failing in a matter of days.

Cellwatch battery monitoring system

Investing in your UPS power protection equipment alone is not enough to guarantee that your UPS will be available when required.

Businesses that rely on technology for their day-to-day operations cannot afford to risk even a split second of downtime, let alone an extended outage. Despite advances in UPS technology, one truth remains the same: when the power fails, the UPS needs to draw its power from banks of batteries to feed the critical load until it is able to start and synchronize standby generators. It is well understood that batteries are the most vulnerable part of any UPS and that battery failure is a leading cause of power-related downtime. The more customers know about their batteries, and the more detailed and current that information is, the better their chances of averting disaster.

YOU NEED MONITORING BECAUSE...

Monitoring provides security and efficiency

Cellwatch is the premier battery monitoring system for highly critical technology installations where loss of power continuity is quite simply just not an option.

With the correct use of Cellwatch any unplanned outages due to battery failure can be eliminated and proper preemptive battery management can be undertaken.

Monitoring saves you money

As well as being a critical part of ensuring power continuity, Cellwatch saves money by:

- Improving UPS uptime
- Reducing otherwise ineffective maintenance by as much as 75%
- Maximizing battery return on investment
- Accurate forecasting
- Increasing maintenance personnel safety

Daily battery monitoring is the key to overall power dependability on critical sites

In a power critical environment it is essential to know the continuous state of health of the lead acid batteries supporting the critical load daily. Cellwatch ensures that these critical batteries are in a good state of health and will function when required.

Unlike other battery monitoring systems, Cellwatch has been specifically designed to monitor the ohmic value of all the jars in a battery every day. By avoiding the time consuming and potentially dangerous manual method of testing individual batteries, Cellwatch dramatically increases the likelihood of identifying a potential failure long before it becomes a power continuity problem.



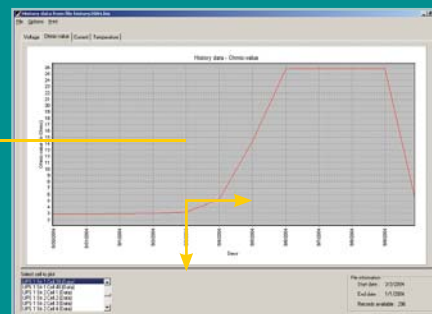
Cellwatch systems are supporting critical loads throughout the World.

There are no known customers operating Cellwatch who have had a "dropped" load due to battery failure.

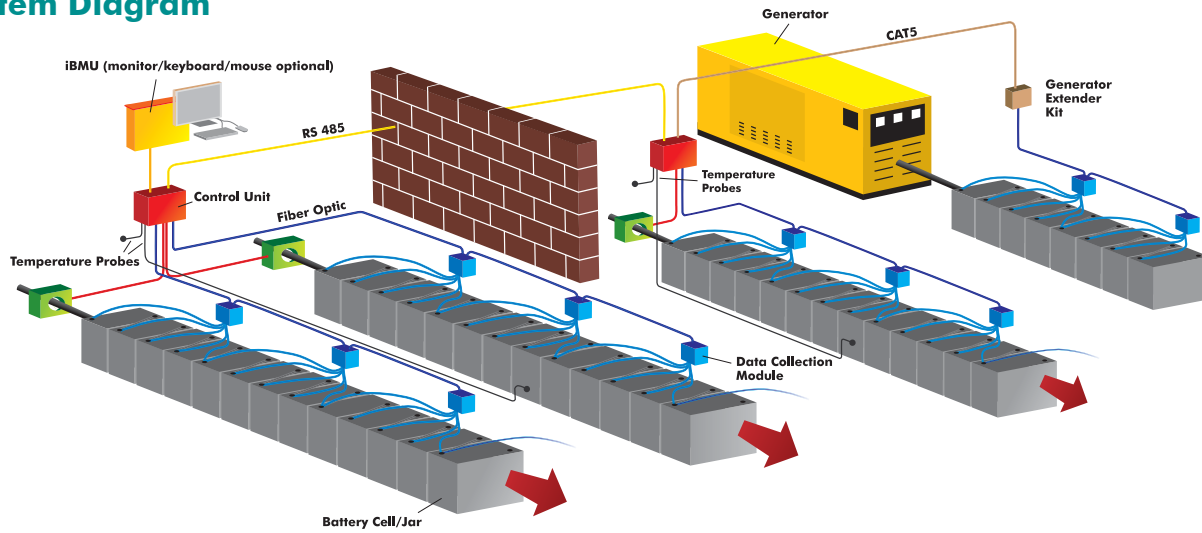
The reason?

- Cellwatch is designed to monitor batteries for ohmic value **daily**.
- Cellwatch allows full visibility of the **total** battery install including the generator and switchgear batteries.
- A high level of reliability is maintained by changing suspect cells well before a failure occurs.
- Many Cellwatch systems pick up battery failures on install.
- Allows 24/7 monitoring.
- Gives **real** usable data of each cell or jar/block in the battery system.

Complete failure took only two days

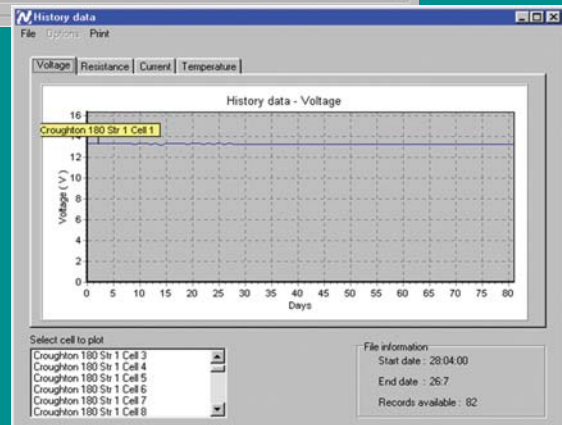
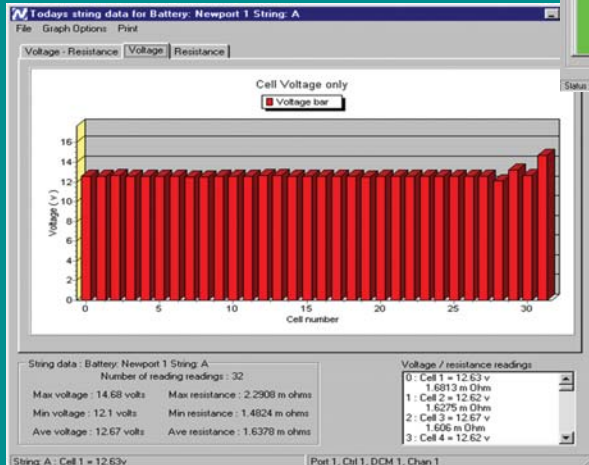
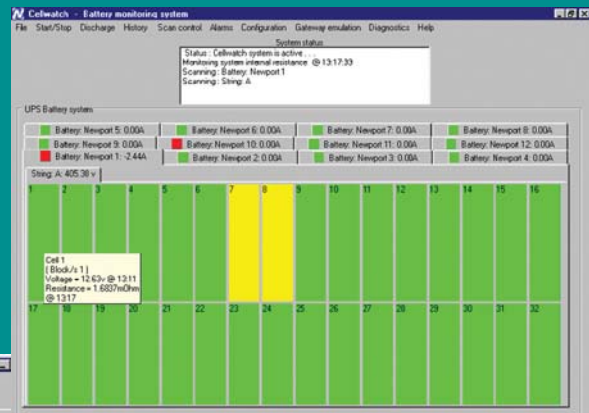


System Diagram



Features and Benefits

- User friendly
- Easy setup
- Extensive data trending
- Remote monitoring
- Remote alarm notification (mobile)
- Logging features
- Analysis software





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|----------------|-----------|---------------------|---------------------|---------|
| Australia | Greece | Malaysia | Saudi Arabia | Turkey |
| Brazil | Hong Kong | Norway | Singapore | UK |
| China | India | Oman | Spain | Uruguay |
| Czech Republic | Indonesia | Philippines | Sweden | USA |
| France | Israel | Poland | Thailand | |
| Germany | Korea | Republic of Ireland | Trinidad and Tobago | |

Incorporated in 1987 and headquartered near Research Triangle Park (RTP) in Raleigh, North Carolina, NDSL is a leading provider of technology and service solutions for mission critical standby power systems. Mission critical industries use NDSL battery monitoring solutions throughout the world to prevent unplanned outages due to battery failure and improve the operating costs of their backup power systems.

Cellwatch Battery Monitoring Solutions:

Cellcare™ – Our line of value added services enhances the value of your Cellwatch system:

Cellwatch.net – Online monitoring of all your sites

Onsite Training

Extended Warranties and Maintenance Agreements

Installation and Repair Services

Cellwatch Satellite – Remote monitoring interface for power distribution monitoring appliances. Ideal for utility and telecommunication industries.

For more information on the complete Cellwatch family of battery monitoring solutions, visit

www.cellwatch.com

