







EDX DC-3 environmental monitoring solution

Designed to monitor and report on power, temperature and humidity conditions within a data centre, in real-time .







Data Centre Power Consumption, Cooling Or Hot Spots – Name Your Biggest Issue

As your computing infrastructure has expanded, it has begun to draw more and more power from the electric grid and produce more and more heat in your facilities. If you haven't noticed these trends in your electric bill, you may notice it when your utility comes to you to say they have no more power to give you... If power consumption isn't an issue yet, cooling may be. Do you have hot spots in your data center? Are cooling problems causing reliability issues?

Energy Efficiency is One of the Top 5 Concerns

You should know that "energy efficiency" is no longer a back office issue. Energy efficiency is one of the top 5 concerns for leaders of public sector institutions, government officials, and for CEOs. And this is true for companies and institutions of all sizes. If an IDC installed base forecast through 2010 holds, the cost to power and cool servers in the data center will increase 54%. And that is not even counting all the chillers, humidifiers, UPS, Switchgear/generator and lighting required by servers and storage units in order to operate a peak performance.

We understand the range of energy issues that you face in running expanding IT infrastructure. With years of experience assessing and monitoring environmental data, we have built an easy to use non-invasive approach to collecting this critical data center information.

Environmental Monitoring of Your Data Centre

Assessing and monitoring your data center power, temperature and humidity will not only assist you to take the appropriate actions to reduce your energy usage and lower the operating costs of your IT equipment but you may be eligible for a rebate from your local utilities and or provincial/federal government energy funds. In net, you can easily assess and monitor the power, temperature and humidity of your data center enabling you to take the appropriate corrective actions to improve the efficiency and reliability, free up data center space and capacity for future growth, reduce costs and take actions which helps your commitment to a better environment.



CAPP Associates is pleased to introduce the **EDX DC-3** environmental monitoring solution, which has been specifically designed to monitor and report on power, temperature and humidity conditions within a data centre, in real-time.

According to the Green Grid (a global consortium dedicated to advancing energy efficiency in data centres and business computing ecosystems), many data centres operate with a power usage effectiveness that is twice as high as its achievable levels. *With the proper power usage information, these data centres can save 50% of their power costs*, and, for example, mid-sized data centres can reduce their CO² emissions by over 350 metric tons per year.

Power usage within a data centre is distributed between a number of different areas, as outlined in figure 1.

Figure 1: Typical Distribution of Power Usage within a Data Centre



Of note, is that a significant portion of a datacentre's power consumption relates to cooling and humidity. It is for this reason that the **EDX DC-3** product has integrated granular level temperature and humidity elements into this offering to ensure that all of the environmental aspects of your data centre are in balance.



Monitoring Data Centre Environmental Conditions

EDX DC-3 has been developed by Integrated Monitoring Solutions, as part of its Environmental Data Exchange family. The **EDX DC-3** solution utilizes wireless and non-intrusive technologies to monitor all aspects of a data centres environmental conditions, so that real-time and on-going operations can be optimized to reduce costs and your data centre carbon footprint. The solution includes:

 A detailed assessment of the power, temperature, humidity characteristics and the carbon footprint of your data centre, using results collected during an initial 30-day period, following setup. This information is meant to identify immediate opportunities through which your data centre can find savings, and optimize its operations, as well as to provide a reference point to which on-going results can be compared.





- 2. On-going real-time power, temperature and humidity monitoring with the results presented through an on-line dashboard on a 24/7 basis. The system allows users to set their own alarms, which automatically respond with text message alerts, and includes an audit trail of responses.
- 3. Annual assessments of the data centres operations to assist data centre operators in identifying new and on-going opportunities.





Only The EDX DC-3 Solution Provides You With:

- Discrete circuit level power consumption to isolate HVAC, telephone system and rack level power costs, and variations in usage; as well as, information about the related power factor and phase imbalances.
- The means to monitor power consumption without having to shut down any electrical devices, such as servers, HVAC systems, etc.
- The use of wireless and wired temperature and humidity sensors that can be easily installed, and moved as necessary.
- Environmental results that are reported 24/7 through a secure, web-enabled interface that includes a dashboard, along with live multi level 2D thermal imaging, tabular and graphical displays.
- 2 years of power, temperature and humidity results that are available on-line, for day-today, month to month, and year-to-year comparisons.
- A fully scalable system to meet changing future requirements.
- User definable alarms for out-of-range power, temperature and humidity conditions and text message notifications when out-of-range conditions occur.
- A full audit trail of user responses to out-of-range conditions.

Contact Us

We are pleased to offer the most comprehensive package currently available to address the complete array of environmental concerns associated with data centre operations. We would be happy to discuss how implementing EDX DC-3 could benefit your organization.



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