Sensicast Ships Industry-First Data Center Monitoring System

Wireless sensor network monitoring solution increases energy efficiency, safeguards hardware warranties, and reduces data center downtime

BOSTON, MA – September 6, 2007 – Sensicast Systems®, the world's leading provider of turnkey wireless sensor network systems, today announced the availability of a new end-to-end SensiNet® system to monitor data center conditions. Designed with extensive input from Sensicast's enterprise and carrier customers, the SensiNet Data Center Monitoring solution has been optimized to deliver a comprehensive wireless sensor system that can reduce energy usage while increasing energy efficiency and savings, safeguard hardware warranties, and avoid data center downtime.

SensiNet is an end-to-end wireless sensor network system that integrates Sensicast-built hardware and software to seamlessly monitor environmental conditions in data and communications centers. Sensicast ensures maximum system reliability by helping to maintain a stable environment free from dangerous fluctuations which lead to equipment and system failures and inefficiencies. Sensicast Smart Sensors capture measurements from key areas of concern -- including temperature, humidity, moisture, airflow, and power -- and then wirelessly transmit the data to a SensiNet Gateway. The data is then immediately available to in-house or Web-based software applications and services. Data center operators can then choose whether to act, while also tracking trends or using the data for reporting.

Energy Savings and Efficiency

As a participant in the Department of Energy's Save Energy Now campaign and its Industrial Technologies Program, Sensicast and its technology innovations dovetail with governmental and utility initiatives to help data centers to reduce their energy consumption and realize energy savings.

"Improved data center energy efficiency could lead to a savings of 20 billion kWh per year by 2015, which is the equivalent of the annual electricity use of 1.8 million American homes," said Paul Scheihing, Technology Manager of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE). See Scheihing's presentation on "Creating Energy-Efficient Data Centers" at http://www1.eere.energy.gov/industry/saveenergynow/docs/doe_data_centers_presentation.ppt.

Sensicast's Data Center Monitoring system lets operators track, profile and analyze data center energy use, giving them essential information for Energy Savings Assessments and best practices which can lead to opportunities to cut electricity demand.

Inside data centers, SensiNet thermal sensors can be placed in equipment racks and special SensiNet "tethered" sensors can measure IT equipment skin temperatures. SensiNet identifies "hot spots" and can generate automatic alerts in the event of problems. Pre-configured software interfaces connect SensiNet with building control automation software to manage HVAC systems. Furthermore, SensiNet Smart Sensors can monitor the power consumption of all data center equipment and transmit this data to existing building control systems, which, when managed proactively, can generate significant energy savings.

Compliance with Equipment Warranties and Service Level Agreements

SensiNet monitoring provides essential ongoing documentation of real-time conditions in datacom facilities in order to comply with electronic equipment manufacturers warranty agreements. Warranty terms covering datacom equipment from leading manufacturers such as Cisco, Dell, HP and IBM include language indicating that warranties may be void when products are operated outside "published environmental specifications"[1] or in an "unsuitable physical or operating environment."[2]

Through its ability to continually track and report temperature and other facility conditions, SensiNet helps data center managers make necessary environmental adjustments immediately while documenting that their IT equipment has operated in accordance with manufacturers' recommendations.

Beyond its use for equipment warranty compliance, SensiNet also provides support for Service Level Agreements (SLAs) for utility services providers who offer hosting of Web, network, and SAAS (Software as a Service) provisioning to other companies. A notable example of a current Sensicast customer in this field is SAVVIS, Inc., one of the world's largest providers of IP computing services.

Maximum Uptime
As long ago as 2001, the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), cautioned that any equipment running "outside its allowable operating environment risks catastrophic equipment failure."[3] Monitoring the environment conditions in a computer room or data center is critical to ensuring uptime and system reliability, and avoiding the high cost of downtime. Gartner, Inc. estimates the average hourly cost of downtime for a computer network at $42,000. At these costs, even companies with 99.9% uptime lose hundreds of thousands of dollars each year in unplanned downtime. Maintaining recommended temperature and humidity levels in the data center can reduce unplanned downtime and save companies thousands or even millions of dollars per year.

SensiNet monitors adverse environmental conditions that can cause downtime including brownouts, voltage spikes, and sudden loss of HVAC. In addition, support for historical reporting and data archiving makes it easy to spot trends and evaluate off-hour operational conditions. Through its provision for real-time alerts, alarms, escalation and data storage, Sensicast helps to maintain the integrity, reliability and security of mission-critical network, hosting and applications.

White Paper Available
Issues addressed and benefits enabled by the new system are detailed in Sensicast's new White Paper: "*Wireless Sensor Network Solutions for Data Center Applications*" which may be downloaded at: http://www.sensicast.com/uploadedFiles/WP-WSNs_for_Data_Centers.pdf.

About Sensicast
Sensicast provides turnkey Wireless Sensor Network systems that help operating managers dramatically reduce costs, improve efficiency and document compliance. Sensicast's patented, easy-to-deploy SensiNet® systems capture real-time data from applications, processes, and facility conditions and make the information available and actionable through internal and remote Web-based access. SensiNet meets the needs of a wide range of industrial and commercial enterprises—including remote monitoring of temperature, energy, moisture/humidity, and other data types; while facilitating governmental/environmental compliance.
For more information: www.sensicast.com.

References:
1--HP Warranty:
ftp://ftp.hp.com/pub/networking/software/5990-8862-ProCurve-software-license-warranty-and-support-June-2006.pdf
2--IBM Warranties:
http://www-304.ibm.com/jct01004c/systems/support/machine_warranties/PDF/Z125-4753-09_Eng.pdf
3--ASHRAE Research: http://tc99.ashraetcs.org

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