John Allegro - Utilizing IP networks to reduce carbon emissions

July 25, 2011 - Green Buildings

Building owners and occupants can now utilize the IP network to take control of energy consumption as they seek to reduce carbon emissions. Pioneers like N.J.-based Crestron Electronics have developed platforms that allow end users intuitively manage, monitor, and schedule every environmental and audio/video system from any touch screen, web browser, or mobile device for peak performance and optimal energy savings. Through seamless integration of control systems, scalable commercial lighting systems, and software, Crestron's Integrated Building Technology (IBT) connects every room and every building.

Heating, cooling, and lighting are accountable for more than 60% of the energy consumption of the average U.S. office building. Controlling inefficiencies presents a tremendous opportunity to reduce a company's monthly energy expenses. Integrated building control solutions provide "intelligent room scheduling" features, which make sure lighting, heating, and cooling resources are used with maximum efficiency. Integration with Microsoft Outlook provides a user-friendly interface to schedule conference and meeting rooms. Just before the meeting start time, the room automatically "wakes up" by powering up projectors, climate control, and lighting. After the meeting concludes, occupancy sensors detect when the room has been vacated and automatically power off devices.

Control systems can reduce energy consumption by automatically shutting off unneeded lights after business hours, adjusting HVAC settings during unused time, and by lowering artificial lighting levels when natural light can be harvested through windows. Rooms can be automatically locked out to prevent unauthorized use of televisions, sound systems, and other AV equipment. All of these functions can be managed through touch panels and computer interfaces from a centralized command center, or local control in each room.

Working late? No need to worry. Occupancy sensors can detect movement and illuminate areas that are in use and exit pathways, shutting down after a preprogrammed period of time.

Integrated building control systems, running on the IP network, can be designed for all types of environments including; convention centers, office buildings, hotels, schools, and sports arenas. These technologies allow us to take full advantage of the power of the converged network while helping us in our efforts to become more green and sustainable. For more information about Integrated Building Technology, visit www.crestron.com.

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