

Street Legal An Authorized Distributor Of Simple Control Technology!

In June of 2011 Street Legal Industries was introduced to the innovators and founders of Simple Control Inc. (John Miller, President and Jason Hubbard, Vice President of Sales and Marketing). We immediately recognized the importance and impact this technology would have on the Energy Management market and requested the rights to be an authorized distributor for this product. After a review of their test facility and several meeting to better understand the technology Simple Control and Street Legal signed a Distributorship Contract that we hope will benefit both companies and its clients for some time to come.

Street Legal will be a full service provider for this product. Street Legal will Market, Install, Maintain, and provide warrantee support for this product. Street Legal will also provide this product whenever practical through its various current and future government contract mechanisms.

Simple Control: How Does It Work?

The unique aspect of Simple Control's system is that it solves the central problem that has plagued Energy Management Systems (EMS) since their inception. How do I get a consistent, reliable, and easy to manage EMS that gives me the cost and/or energy return that was anticipated?

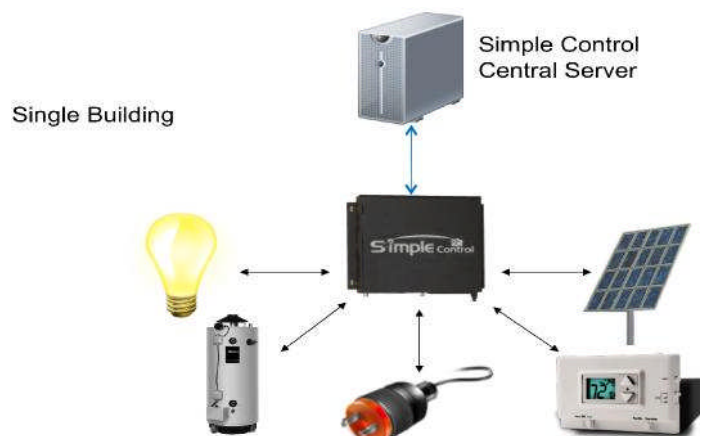
The problem with traditional EMS solutions is that they required a great deal of onsite programming and monitoring to ensure reliability and consistent operation. The result was a system that was rarely well programmed initially and required numerous return visits to the site to adjust and refine settings so that occupants' comfort was maintained while attempting to maximize savings. Inevitably over time even the best programmed system will lose effectiveness as occupancy and usage patterns change. This is the problem with an EMS that requires constant human interface to ensure proper functionality. Simple Control solves this problem through a continuous commissioning system where patterns are constantly analyzed and system settings optimized to maximize savings while having no noticeable impact on the occupant's comfort.

What Are The Components Of The Simple Control EMS?

Most systems are comprised of proprietary hardware that is very expensive to maintain and replace. Simple Control is comprised of any number of off-the-shelf components along with a minimal amount of proprietary hardware and software that is the heart of the Simple Control EMS.

- Simple Control Controllers (Proprietary)
- Light Switches (Off-The-Shelf)
- Thermostats (Off-The-Shelf)
- Energy Monitors (Off-The-Shelf)
- Hot water relay actuators (Off-The-Shelf)

The image depicted demonstrates the interaction of the Off-The-Shelf components with the Simple Control controller and Simple Control Central Server.



How Do The Components Interface And Control?

The Simple Control system is based on open standards for communication and control of devices through hardware (RS232/RS485) or wireless (Zwave, Insteon, UPB, X10, etc). Lighting through UPB, Zwave, Insteon, X-10, Lutron protocols are accommodated through hardware interfaces that are attached to the Simple Control EMS. In addition HVAC devices based on Serial RS232/485 and Zwave are also included. Preconfigured events designed to improve energy efficiency are incorporated into each system out of the box for HVAC, lighting, and hot water timing controls.

Any device attached to the controller may be used as a sensor for input. For example an office light can be used to indicate occupancy, when the light turns on the system can adjust the HVAC system for occupancy. Also multiple conditions, such as Office 1, AND Office 2, AND Office 3, lights being off could tell the system that the building is unoccupied and execute an event to set all systems to their away condition.

How Are Energy Events Managed?

Events are a series of actions to remove, or minimize, power consumption from those controlled devices. Light switches turn off, hot water turns off, HVAC set points are adjusted to minimize power, power strips are turned off, personal computers are turned off or put into Hibernation. Occupant arrive events can be staged for different sections so spikes and demand charges are minimized. Whole sections of the building can be awakened at different times and pre-configured to specific comfort requirements based on the occupants needs and peak energy usage. The system learns from patterns over time and will adjust start times for conditions such as outside temperature and building heating and cooling characteristics to minimize the time required to operate HVAC systems in order for the building to reach a comfortable state by the projected occupancy time. Events can be as simple as sending an email to building maintenance and an HVAC contractor when one of the HVAC units needs servicing, to event management of multiple device controls over numerous geographically dispersed buildings.

How Are Multiple Components Connected To Multiple Facilities And Security Maintained?

Simple Control uses a broadband connection to establish connectivity to individual controllers using encrypted connections. AES 256 with 1024 bit encryption is used to ensure the highest levels of security. All of a customer's Simple Control controllers communicate and share information with each other, so a single dashboard may be used to monitor multiple controllers, multiple buildings, and/or multiple geographic locations. For example when a building in Houston Texas changes to an occupied state, a device could react in Atlanta Georgia. Data is pulled from individual controllers to the Simple Control Central Server where analytics and algorithms are run in order to recognize occupancy and energy usage patterns within the building. Analysis and adjustment to settings is performed constantly on the systems so that energy usage is optimized without impacting user comfort. This means that over time as patterns change the systems dynamically react to those changes in order to maximize efficiency when the building is both occupied and unoccupied while not impacting the occupants' comfort.

