Today the World is Building Greener Automobiles… Encelium is Building an Environmentally Sound Place to Garage Them…

Encelium's customized parking garage lighting control solutions will reduce your carbon footprint while providing extraordinary energy savings, an immediate return on investment and a secure environment in this 24/7 application.

Lighting Control for the Intelligent Parking Garage

ENCELIUM

LIGHTING CONTROL FOR THE SMART BUILDING

Only Encelium Parking Garage Systems Put Safety and Security First While Delivering 50% Overall Lighting Energy Savings

For more information: **www.encelium.com**

No Other Lighting Control System Can be Customized to Suit Different Parking Garage Applications Like Encelium's ECS

Only ECS offers both the flexibility and configurability to provide customized lighting control solutions to match the unique requirements of both indoor (climate controlled) and outdoor parking garage applications. Unlike most other lighting control offerings, Encelium's ECS was designed from the ground up as an integrated lighting control and energy management system that delivers the shortest possible payback from energy savings while improving garage lighting quality, safety and security. The system is ideal for both retrofit and new construction applications and will work with your existing lighting system.

Parking Garages Offer Building Owners the Opportunity to Secure Large Energy Savings With a Relatively Modest Investment

- Because of the need for safety and personal security, parking areas are normally lit 24 hours a day, seven days a week, 365 days per year.
- No other space in commercial or industrial real estate has such intermittent tenant usage (low to zero) outside of normal working hours.
- Retail and event parking areas are generally over lit as the need for safety and security is heightened because of public access and the large volume of people moving through the space at the conclusion of an event or retail closing time.
- Energy savings potential is therefore very large because of the sheer size of most parking areas coupled with the fact that lighting power densities are high and lights are generally uncontrolled.

A Customized Lighting Control Solution

- Parking garage applications allow for a high degree of zone control tied to either occupancy sensor detection or event driven time schedules.
- Occupancy sensors are typically placed at entrances to all levels, all connecting ramps and at the beginning of all traffic aisles to achieve extremely granular lighting control.
- Configurable warnings or occupancy sensor timeouts can be programmed to ensure safety and security for occupants.
- ECS can be integrated with existing fire and security systems such that in the event of an emergency, all lighting zones can be triggered to come on at full brightness.
- ECS may also be integrated with today's advanced parking management systems.

Controls Bring Dramatic Lighting Energy Reduction

- The Encelium ECS parking garage solution is a dynamic control system that reacts to the real time use of the space rather than leaving lights completely uncontrolled or subject to an arbitrary time schedule.
- As cars enter the space, a drive aisle can be illuminated ahead of the vehicle as an occupancy sensor is triggered.
- Sensors are placed strategically to ensure that a space is illuminated well ahead of its occupancy ensuring comfort and security.
- Parking levels can also be "de-activated" after normal business hours where occupancy patterns are predictable.
- The system can also be used to "guide" drivers to desired sections of the parking garage by leaving lights off in sparsely occupied sections.
- As a result, energy savings in parking applications often exceed 50%.

Key Strategies Applied to Reduce Energy Consumption in Parking Garages

Smart Time Scheduling

Lighting in a parking garage can be divided into discrete control zones and the facility manager may dictate which zones are allowed to be illuminated at any given time. Time scheduled switching may be co-ordinated with either predictable traffic flows or tied to significant daily event milestones (i.e. office opening/closing, just prior to a sporting event, shopping hours etc.) preventing wastage of energy by reducing light levels to a “safety” setting outside of peak traffic times.

Task Tuning

Through the use of dimming ballasts or alternate fixture switching, light levels may be reduced to a level adequate for the functionality required in the space. In the event of a security or emergency all fixtures revert to full power.

Occupancy Control

Occupancy control is the core strategy for parking garage energy management. Occupancy sensing allows only those spaces which are occupied to be lit to a predetermined optimal level – all others are either off or illuminated to a default safety level.

A Sound Investment Today and for the Future

Encelium customers demonstrate to the community at large their corporate commitment to sustainability and the environment. Put simply, regulate consumption and the implications of greenhouse gases are reduced. And savings of 50% - 75% speak for themselves. In almost every installation Encelium delivers these impressive results – ROI that no other competitor can match all while improving the workplace environment.

Corporate Commitment

Encelium was founded in 2001 as a software and systems company with one specific mission – to design the world's leading lighting energy management system – a system focused on minimizing energy consumption while improving lighting quality and workplace ergonomics. With its software roots, Encelium is uniquely built around this mission. Most competitors in this sector are hardware focused and have merely adapted existing architectural light control systems in an attempt to manage light consumption.

The differences are clear in both cost effectiveness and delivered energy savings. No other system available today delivers savings approaching 75% while providing realistic ROI's acceptable to building owners and their financial managers. This is made possible by system architecture that permits the use of standard lower cost lighting components coupled with centralized software that is both granular in control and strategy integrative. The software also provides robust gateways to other building systems further promoting the concept of "smart" or intelligent buildings and LEED certification.

European and North American markets have responded with an outstanding endorsement of the Encelium approach and we now have over 250 projects completed and thirty million square feet controlled – more than all competitors combined.

Headquartered in New Jersey U.S.A., Encelium also has sales and technical offices in Canada and Europe that provide a level of support to our customers unequalled in the industry. It is our continuing mission to constantly enhance Encelium's reputation for outstanding customer service and quality.

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