



## Hospitals Care for This Generation... Encelium Helps Hospitals Care for the Generations to Come

Encelium's customized health care lighting control solutions will reduce your carbon footprint while providing extraordinary energy savings, an immediate return on investment and optimized lighting control in this 24/7 environment.

Lighting  
Control  
for the  
Intelligent  
Hospital



**ENCELIUM**

LIGHTING CONTROL FOR THE SMART BUILDING



# < Encelium ECS is Uniquely Adaptable to the Hospital Challenge

For more information: [www.encelium.com](http://www.encelium.com)



## Opportunities for Customized Control

Encelium's integrated approach to light energy management has the flexibility to meet the special lighting requirements for each type of hospital application while delivering typical energy savings ranging from 50% to 75%.

### 1 Patient Care Areas

Controllable lighting in patient care areas is essential to the efficient operation of these spaces. As they operate 24/7 and the individual patient is recovering on a unique schedule, bedside control of lighting not only allows each patient to control the light levels in their space but also frees up staff to focus on more essential tasks other than adjusting patient lighting levels.

### 2 Diagnostic, Therapeutic Treatment and Laboratory Areas

These areas frequently involve interface of the patient to diagnostic or treatment equipment. Generally two light levels are required – a bright level for patient positioning and connection and a lower light level during treatment allowing the physician or technician to more easily read images and monitoring equipment. Encelium allows customizable scenes to be saved to match individual physician/technician preference.

### 3 Administrative Areas

Most office/administrative areas can make use of all of Encelium's six energy saving strategies to maximize light energy savings. A key emphasis in these areas is the management of natural light (daylight harvesting), occupancy sensor based control and individual control over workspace lighting (personal control).

### 4 Support Areas

Hospital support areas are numerous and take many forms (kitchen, supply and maintenance to name a few). By their nature, they are used intermittently and therefore time scheduled switching/dimming and occupancy sensor based control may be easily deployed resulting in significant energy savings.

### 5 Public Areas

A growing area of the modern hospital and a significant source of revenue to the hospital, this category of space encompasses cafeteria, food concessions, retail gift and floral, pharmacy, patient waiting areas and all corridors and entrances. Here the Encelium system determines the appropriate light level based on time of day, use or occupancy density and then dims or switches lights accordingly.

### 6 Parking Decks

A major source of revenue to most modern hospitals, the parking garage offers numerous ways to save energy and to maximize profit to the institution. Encelium's ECS technology manages the tradeoff between safe and secure garages and reduced energy consumption offering savings often in the range of 50%. Zonal switching and occupancy sensing are most often deployed in this application.



## Six Strategies to Reduce Energy Consumption, Save 50% to 75% and Reduce Your Carbon Footprint

Hospitals are purpose built structures that have many areas which are intensive consumers of lighting energy. Encelium's six energy management strategies are ideal for deployment in this complex environment, resulting in a potential energy savings of 50 - 75%:

**Smart Time Scheduling** In areas of a building where occupancy sensor control is not appropriate, time scheduled switching or dimming of lights can be employed for zones as small as a room. Where people arrive and leave often at staggered times – smart time scheduling captures significant energy savings. Typical applications would include spaces such as maintenance and cafeteria.

**Daylight Harvesting** Through the use of photo sensors, light levels are automatically adjusted to take into account natural light coming through the windows - fixtures adjacent to the windows are dimmed down and a comfortable working light level for the occupants is maintained. Typically applications would include administrative, laboratory, public areas and general office areas.

**Task Tuning** Setting maximum light levels to suit the particular tasks or uses of a workspace in order to eliminate excessive lighting. Generally this application would be deployed hospital wide where appropriate.

**Occupancy Control** Through the use of occupancy sensors, lights are automatically turned off or dimmed based on occupancy detection. This strategy deploys well in washrooms, utility rooms, supply and storage areas, private offices, examination rooms and meeting and areas.

**Personal Control** Through Encelium's personal control software which resides on an individual's PC (linked to the IP network), the office worker can control the light levels in their workspace to suit their personal preferences enhancing both their comfort and productivity. This application would be deployed in different forms in office areas, patient accommodation and physician diagnostic reading areas.

**Variable Load Shedding** Overlaying the above five strategies, the Encelium load shedding feature automatically reduces the electrical demand in a building by shedding lighting loads dynamically (through dimming or switching), either to shave peak demand or react to utility demand response programs. Because of the granularity of control of the system – power is shed by dimming light fixtures in areas where it matters least and is generally imperceptible to the occupants.



## 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 a 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.



# ENCELIUM

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