## The Lighting Control Service

Our Technical Support Team are on hand to offer advice on where and how to select the best control system to be utilised.

We can survey existing installations and provide energy and carbon emission saving calculations along with detailed payback estimates of the total investment.

and date stamped.

graphical formats.

Contact us on 0113 2897832 or email lumisaver@powerlite.net

## Data Logging Service

Prior to quoting any energy/carbon reductions from our intelligent luminaires or control systems, we believe knowing accurate occupancy and activity levels are a must to ensure optimum energy savings

Therefore we install (on a temporary basis), our monitoring devices to measure and record these levels over periods of up to one month. See example below

Their small size allows them to fit almost anywhere, unnoticed.

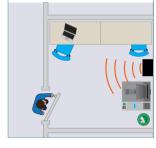
## Data Logging

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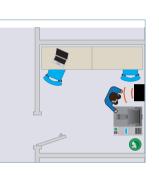


every 15 seconds for presence

in the designated area



Presence is detected and the device logs this against a date and time,



The device's real-time clock ensures that all data is time

The analysis is provided to you in Excel format which

can be easily read and interpreted in both raw data and

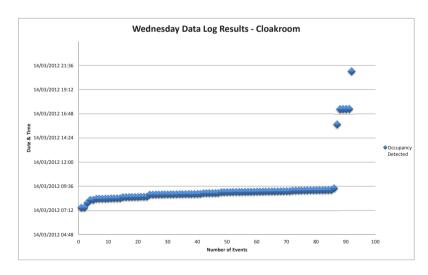
From our experience we know that in some cases savings of

up to 70% can be achieved in installations which are lit 24/7.

15 seconds later the data logger will take another reading, if there is still presence this log continues



Once that particular instance has finished the data logger will continue to take readings but only log when presence is detected



This graph shows typical data log results for an entrance foyer area. The blue symbols represent presence detection

- 17 hour monitoring perio
- Total time occupied 23mins
- Typical energy savings using our Energysaver Lighting system would be approximately 90%

Using the above data along side tabulated data allows us to recommend the most appropriate system to meet your requirements.

For more information contact us on 0113 2897832 or email lumisaver@powerlite.net

# **Lighting Control**







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info@powerlite.net www.powerlite-lighting.com



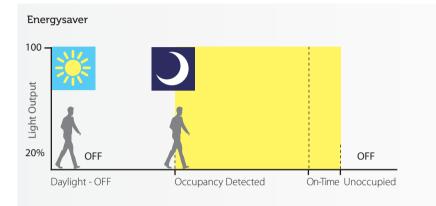


## **Energy Saving Lighting Systems**

In a world increasingly concerned with energy saving and reducing our carbon footprint, we are always striving to provide energy efficient lighting solutions for everyday use and this is why we have developed our Lumisaver and Energysaver concepts.

The theory is simple, only use light when it is needed.

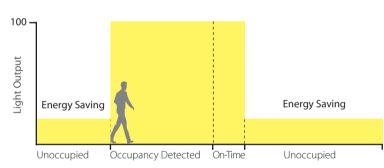
## **Energysaver Lighting Control**

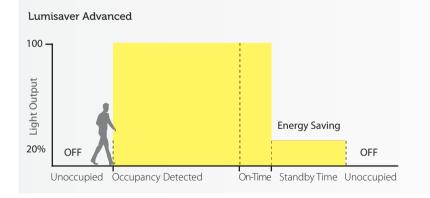


### Lumisaver Lighting Control

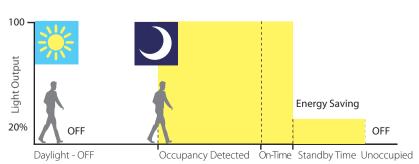
Lumisaver

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#### Lumisaver Advanced with Photocell function



We achieve this using the latest motion sensor technology combined with step-dim ballasts in our Lumisaver system, or standard HF ballast in our Energysaver system.

Although the concepts are relatively simple, we have many variations which are shown below in the diagrams

#### Energysaver - Suffix EH

The 'EH' option allows the luminaire to completely switch off when no presence is detected.

- Uses motion sensor & standard HF ballast
- Switches off completely after on time elapses
- Sensor mounted within luminaire
- Detection range & on time fully adjustable
- Sensor has integral photocell which (if selected) disables the motion sensor until the ambient light level drops below the set threshold

#### Lumisaver Master - Suffix LH

The 'LH' option provides a complete solution that can fit on to existing wiring. Dims to low level when no presence is detected

- Includes Lumisaver ballast & standard motion sensor
- Can switch unlimited number of Lumisaver Slaves (LR)
- Can be used to switch auxiliary devices (Suffix LHF\*)
- Sensor is housed within the luminaire
- Detection range & on time fully adjustable Dimmed level adjustable on Lumisaver Ballast
- \*LHF version includes relay for switching of non-Lumisaver products

#### Lumisaver Advanced Master - Suffix LHA

The 'LHA' option has the same features as the 'LH' with the additional benefit of being able to switch off completely after a standby period

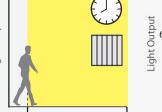
- Includes Lumisaver ballast & Advanced motion sensor
- Switches off completely after standby time elapses

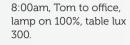
Please contact us for details and availability

The Lumisaver Advanced system can be further enhanced with the addition of a detachable photocell. Meaning that during daylight hours the luminaire will remain off completely, before switching on in the night time hours and operating as in Diagram 4

Please contact us for details and availability

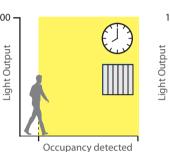
Daylink Lighting Control





8:05am, curtain opened, natural light gets in, lamp on 60%, table lux 300.

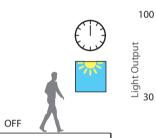
#### Ultimate Lighting Control



Occupancy detected

8:00am, Tom to office, lamp on 100%, table lux 300

8:05am, curtain opened, natural light gets in. lamp on 60%, table lux 300.



Occupancy detected Occupancy detected

12:00pm, daylight reaches 300 lux system shuts down.

4:30pm, sunset, daylight below 300 lux, system re-activated, lamp on 30%

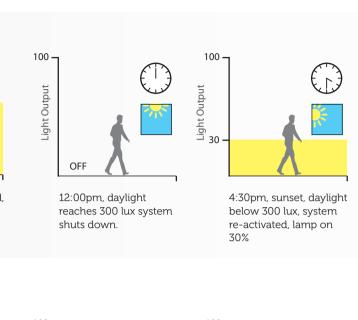
#### Daylink Lighting Control

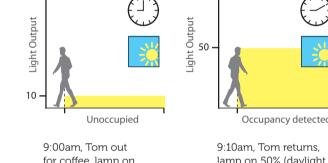
The daylink option allows the luminaire to maintain a set level of illuminance on a target area depending on the ambient light level in the room.

- Includes 1-10V dimmable ballast, Lux controller detachable daylight sensor
- Target illuminance can be adjusted between 100 & 500
- Multiple 1-10V dimmable ballasts can be controlled by Lux controller & daylight sensor (max 400W)

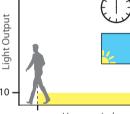
Contact us for further information & availability

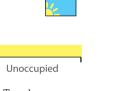
Energy Control Artwork.indd 2

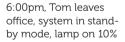




for coffee, lamp on 10% during the short absence.







## Ultimate Lighting Control

Ultimate Lighting Control provides a complete lighting solution. This system has the ability to create flexible and controlled lighting for various environments.

- Includes 1-10V dimmable ballast, Advanced motion sensor, lux controller & daylight sensor
- Multiple 1-10V dimmable ballasts can be controlled by Lux controller, daylight sensor & motion sensor (max 400W)
- On time, target illuminance, standby time & dimmed level are all adjustable using simple DIP switches

Contact us for further information & availability

# Lighting Control -Main Features & Benefits

- 70% reduction in energy usage depending on occupancy levels - See Data Logging Service
- Reduction in environmental impact.
- Fast Payback. Lumisaver can pay for itself in 12 months dependant upon luminaire power and hours of operation. (See Lighting Control Service).
- Lamp Life. Lumisaver avoids the impact on lamp life associated with frequent on/off switching.
- Simple to install. No low volt signal wiring or programming required.
- Discrete sensor within luminaire.
- Replacement for manual wall switches.
- Compliant with the UK Governments' Enhanced Capital Allowance scheme (See Lighting Control Service).

# **Energy Saving Lighting Products**

We use the latest sensor and ballast technology in our energy control systems, but we can also supply individual components for clients to include within their existing luminaires

Our expertise in this field, means we can offer detailed advice on the best uses of these components for clients to include in their own installations. The wide range of motion sensors, each with their own features and benefits, can be easily retro-fitted in to existing luminaires

The unique step-dim ballasts can give additional functionality to existing installations. With the same footprint as many standard HF ballasts, a 'straight swap' is possible. The adjustability of the dimmed level via DIP switches on the ballasts make commissioning a doddle.

# **Motion Sensors**

# Standard Sensor (10m Range) 111 Short Range ۵ ۵ ----Q(EµX (Motion sensor) Advanced Sensor (10m Range)

We combine motion sensors and dimmable control gear to provide simple yet effective energy saving systems

Microwave technology, used in our motion sensors, can 'see through' plastics and other materials, meaning we can discretely place the sensors within the luminaires for ease of installation.

The wide range of sensors provide a solution for every scenario, ranging from a simple on/off function, to dimming (with dimmable ballast) and also dimming then off (with dimmable ballast). See pages 2 & 3.

Contact us on 0113 2897832 for more information on our wide range of sensors or visit our website www.powerlite-lighting.com

# **Typical Applications**

By no means a comprehensive list but typical applications for our Lighting Control Systems include:

- Hospitals corridor links, escape routes.
- Hotels corridors, lift lobbies.
- Student accommodation bathrooms, access routes.
- Car parks underground, multi-storey.
- Store rooms warehouses.
- Schools, colleges exterior security/amenity lighting.
- Toilets open 24 hrs, camping site shower blocks.

# Features & Benefits

- Simple to install
- Wide range of sensors
- Integral photocell on Standard & short range sensors
- Detachable photocell available on Advanced sensor
- Almost all lamp options covered •
- Step dimming available with SensorDim ballast

SensorDim ballast available for T5, T8, compact fluorescent and 2D lamps.

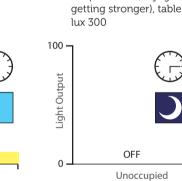
# **Control Gear**

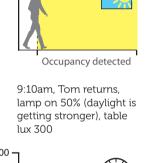


We can offer an extensive range of dimmable control gear which work in conjunction with our sensors, as well as from other PIR's and switches.

Utilising step-dim technology the luminaires can switch between 100% output when areas are occupied; and a pre-settable dimmed level when there is nobody about.

Contact us on 0113 2897832 for more information on our wide range of control gear or visit our website www.powerlite-lighting.com





6:15pm, stand-by time

out, system shuts down

(Corridor function)