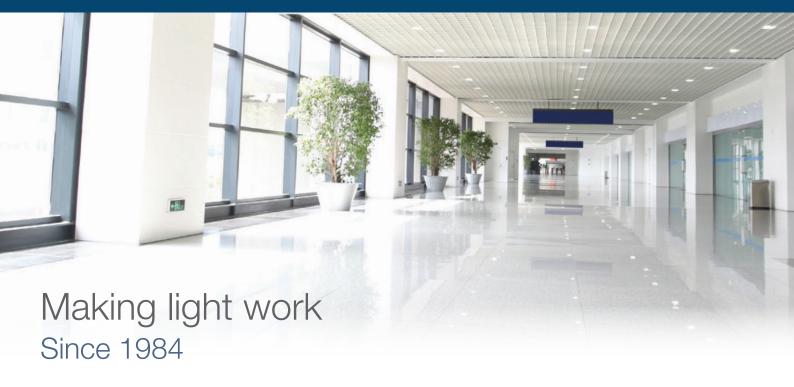


# **DLS DALI in a Room**

**Lighting Control Sensors** 





# For 30 years ECS has been helping our customers make light work.

Energy Conservation Solutions (ECS) helps our customers reduce their energy bills, lower their carbon footprint and improve business performance.

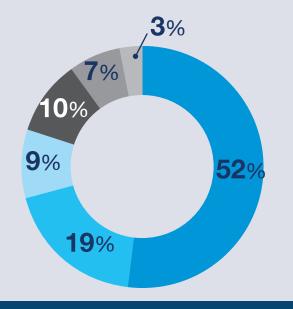
There was a time when lighting was just about illumination. Today it is about balancing the creation of a comfortable working environment with capital expenditure and ongoing life-cycle costs.

Our range of new generation lighting controls can help you save on energy costs - sometimes as much as 70%. This is achieved by ensuring the lights are off when the space is unoccupied and maximising the use of natural daylight when possible.

# Making light work for energy saving

ECS understands the changing requirements for lighting control across a range of applications. This know-how enables the delivery of optimum energy savings without compromising the comfort and performance of the space. Innovations like micro and macro detection, enhanced photocell technology, yin-yang style pyrolytic and the number of sensor zones/facets ensure the optimum light is always provided.

Lighting is the second largest consumer of energy in a building, so it's an obvious target for reducing costs. Lighting controls help you maximise energy efficiency while also enhancing comfort and productivity.



# How your building uses energy



Source: Department of Energy and climate change (July 2012)

# Introducing DALI in a Room

# Making light work for energy saving





# DALI Addressable

- Total control over lighting
- Setting groups and scenes
- · Regulating light levels



# Connectivity

- Sixteen DALI luminaires
- Three DALI sensors per system
- Two DALI switch modules



# Power

- Master sensor 60mA to DALI network
- No additional DALI power supply needed



# Control

- Sixteen independent programmable scenes and lighting groups
- Occupancy based control
- Multipule daylight regulation groups



# Commissioning

- Easy to commission and maintain
- No specialist integrator required
- Using the Quickset Pro, just point and programme

DALI in a Room delivers on all your in room lighting requirements



Providing best in class DALI lighting control application. Ideal in modern work spaces with open soffits and areas needing discrete fittings.

A simple implementation of a powerful DALI addressable system.

# Making light work for energy saving

DALI addressability gives the user total control of their lighting to enhance the lit space. From setting groups and scenes to regulating light levels that maximise the use of natural daylight and when combined with accurate occupancy data can result in energy savings of up to 70%.

#### SYSTEM OVERVIEW

#### Connectivity

Sixteen DALI luminaires connected via a standard DALI network cable.

Three DALI Sensors per system, configured as one master sensor and two network sensors or additional masters.

One mains switching input can be added directly into the master sensor.

Two DALI switch input modules can be added to convert normal 'push-to-make' switches.

#### Power

The master sensor provides 60mA of power to the DALI network, more than enough for the 16 Luminaires, sensors and switch inputs. Hence, no additional DALI power supply is needed.

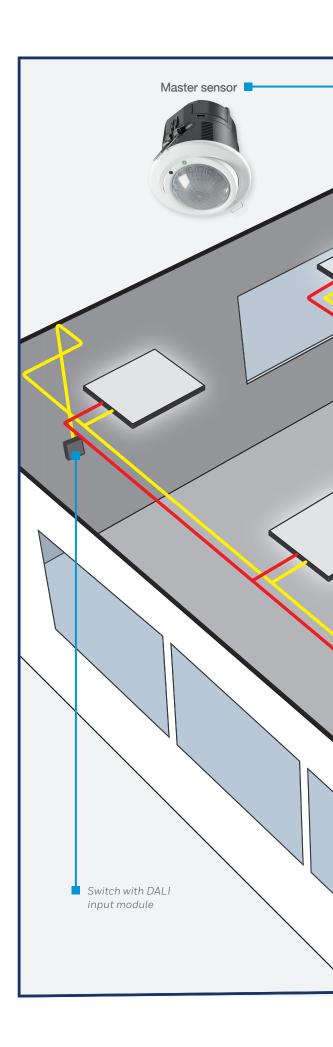
#### Control

Sixteen independent programmable scenes and lighting groups.

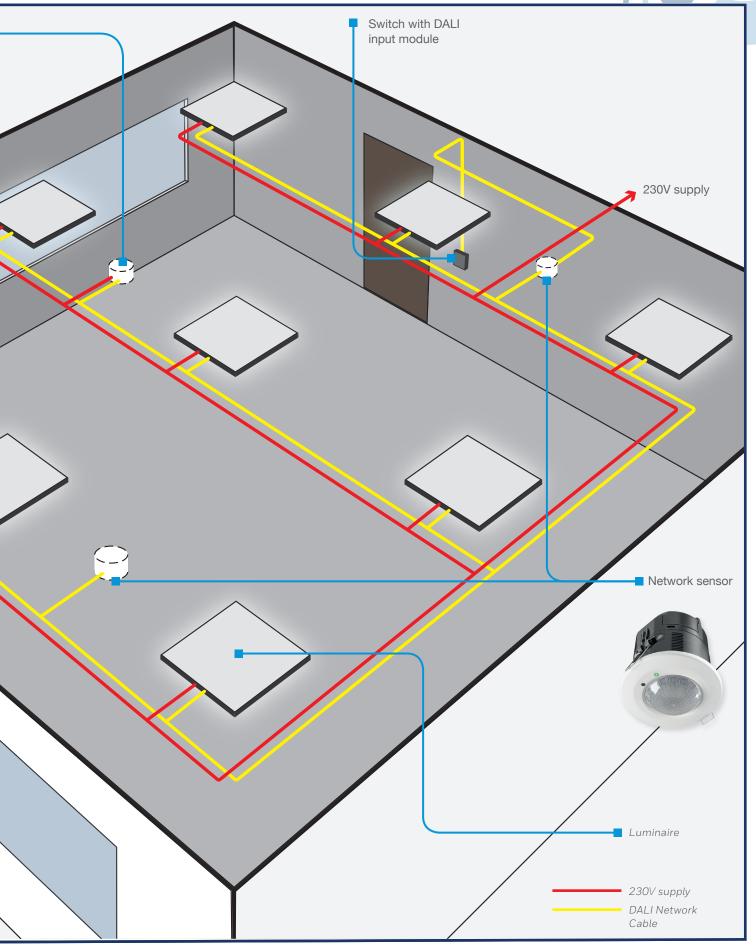
Create occupancy-based control of a nominated lighting group and multiple daylight regulation groups.

#### Wiring

230V mains supply and DALI (two core) network cable.





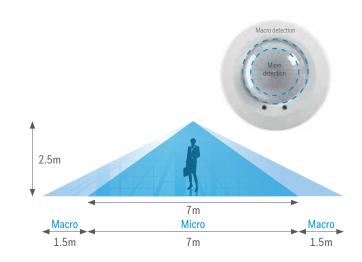


#### Macro and Micro Detection Zones

At a typical mounting height of 2.5m, there's a highly sensitive micro detection diameter of 7m within a 10m macro detection diameter.

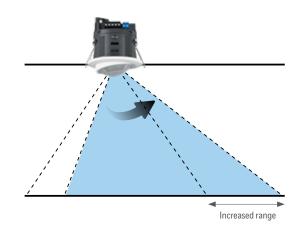
Lights are typically triggered by someone walking into an area, so the macro zone is attuned to large movements. However during occupancy lights need to be sustained by smaller movements, such as those made by someone sitting at a desk, so the inner micro range is much more sensitive to detect these movements.

This extra sensitivity enables shorter time delays to be set and therefore achieve greater energy savings.



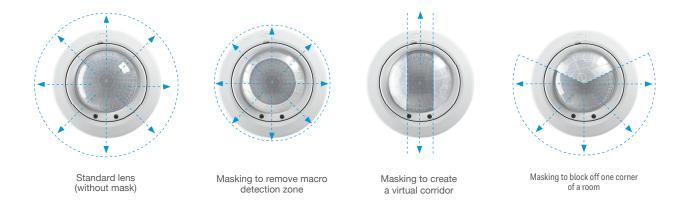
#### **Lens Tilting**

The DALI in a Room master sensor offers lens tilting for installation and commissioning flexibility. The detection zone can be adjusted to accommodate flexible installation locations and our unique antitamper 'twist-2-lock' feature locks the detection area in position. At full tilt the detection are is increased up to 67%.



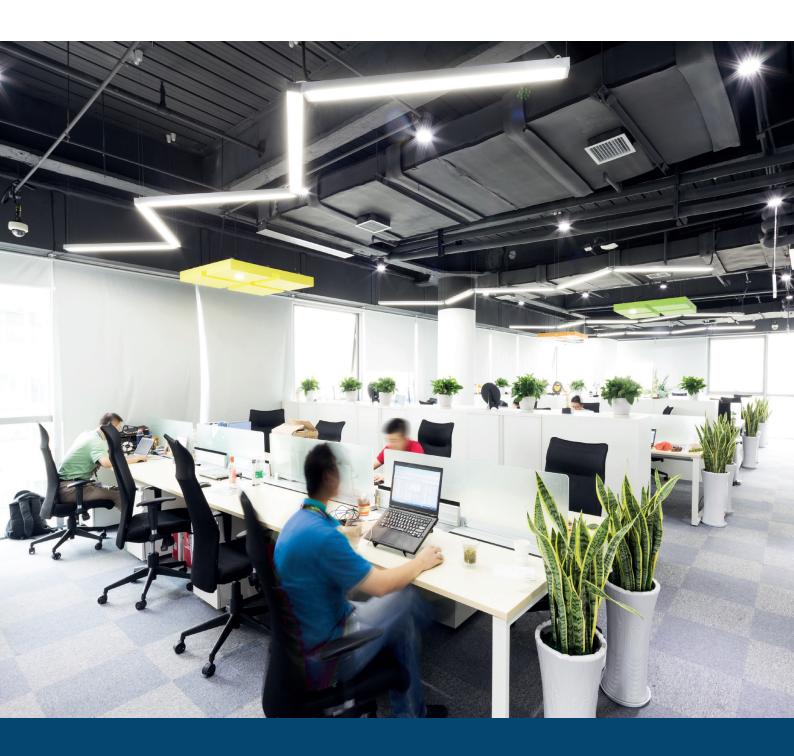
### High Accuracy Lens Masks

Fully customisable lens masks allow for highly defined detection areas. A virtual corridor can be easily created so that passing traffic doesn't unnecessarily trigger sensors.



# Making light work for comfort and productivity

- Sophisticated DALI addressable functionality without the typical complexity and high maintenance costs of traditional DALI systems
- Create comfortable productive spaces by programming and recalling different lighting scenes and groups
- Convert normal 'push to make' switches into DALI addressable switches using the DALI switch input module. Up to two can be added per system, providing up to eight individual switch push functions that can be independently programmed to perform a variety of functions on any of the groups, e.g. On/Off, dim, scene recall, etc.



# Making light work with ease

- Provides up to sixteen DALI luminaire addresses for simple and quick commissioning with the QuickSet Pro hand-held infrared programmer. Pre-programmed popular room templates available in QuickSet Pro can make commissioning even faster
- Feature-rich DALI lighting control system all integrated into a LightSpot HD PIR sensor
- Pluggable, colour-coded connectors make it easy to see what goes where and reduce wiring errors
- Surface mount or flush mount sensors with locking rings or spring clips give you complete installation flexibility
- Recall your programmed scenes and groups with our QuickControl remote or standard switches via DALI input module

#### Colour-Coded Connectors



### Locking Ring Flush Mount



### Spring Clip Flush Mount



#### QuickControl Remote



QuickControl is ideal for:

- On/Off override
- Light level adjustment
- Recall 6 lighting scenes

### **Power Distribution Option**

A DALI in a Room system can be even quicker to wire when combined with an UltraLite Lighting Control Module (LCM) for easy distribution of mains power and DALI network.



See UltraLite brochure for more information at www.ecs.net.au

### Programming



### Easy to commission and maintain

Commissioning could not be easier, just point the hand-held infrared programmer at the sensor and you can commarnd each luminaire to do exactly what you want..

### Just point and programme

You don't need to climb any ladders or pore over a long programming guide, just point and press 'Download' and the intuitive on-screen guide will take you through the whole process.

Use pre-programmed room templates on the QuickSet Pro or create your own.



Scan automatically discovers all luminaires and devices



On-screen prompts lead you through configuration



### Time saving templates

If you have several rooms on the floor with similar layout and you want to repeat the same settings simply 'apply' your saved template. You can commission whole areas in just a few minutes.



Save current configuration as a 'template'

Apply saved 'template'

## Change your settings later

It couldn't be easier. Just download the settings from your sensor, make the changes you want and upload the new settings. You can then update a template with these settings and apply to other sensors.



Download existing settings



Change just those settings required using the onscreen menu



Upload new settings to sensor

#### Add new sensors

Extending a room? Converting an office? Whatever changes you're making, it's easy to connect another sensor to the system. Add up to two additional DALI Network or DALI Master sensors.



Install new sensor and wire it up





Using QuickSet Pro, choose new settings or simply 'use templates' as shown above

# Features and Benefits

EATURES	
DALI lighting control application in a sensor	Simple and quick to install – ideal for exposed soffits
Best in class detection range and sensitivity to small movement	Lights are always on when required - reduce occupancy time delays to maximise energy savings
No additional controller hardware	Reduces hardware cost and saves time on installation
OALI Addressable wiring (just mains supply and DALI two core network cable)	Reduce wiring errors
Soft wiring - easily make changes to lighting without ohysically re-wiring	Ideal for multi-use spaces - easily reconfigure working areas
Easily create sophisticated lighting scenes and groups	Create an enhanced working or learning environment
Connect mains power and DALI network using Ultralite LCM	Easy distribution of mains power and DALI wiring (through soft wiring)

PART NO	DESCRIPTION
DLS4043DALIF	DALI addressable master sensor flush mounted
DLS4043DALISM	DALI addressable master sensor surface mounted
DLS4060NETF	DALI addressable network sensor flush mounted
DLS4060NETSM	DALI addressable network sensor surface mounted
DLS2IM	DALI addressable switch input module

# Accessories

PART NO	DESCRIPTION
QUICKSET PRO	Digital 2-way programmer
QUICKCONROL	Infrared controller
LOCKRING	Flush mount adaptor
CDW4U1UL / CDW6U1UL / CDW10U2UL	4-way / 6-way / 10-way Ultralite LCM





# Energy Conservation Solutions Pty Ltd Exclusive Distributor for Ex-Or in Australia and New Zealand Locations: VIC/TAS, NSW, QLD, FNQ, ACT, SA/NT, WA, NZ For contact details visit: www.ecs.net.au