

SmartScan

ColourActive



3000°K

6500°K



ColourActive Luminaires with SmartScan Control

COLOUR TEMPERATURE CONTROL

Thorlux ColourActive high performance LED luminaires incorporate dual populated PCBs where LEDs with two different colour temperatures (3000K and 6500K) are combined.

The Thorlux designed and manufactured technology utilises twin lighting circuits within each luminaire to vary the output to produce colour temperatures of either 3000K, 6500K or any value in between.

High quality medium power LEDs, placed on a circuit board with integral heat sinking, provide a highly efficient solution.

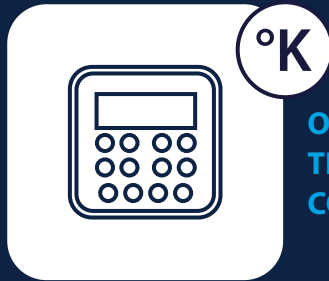
ADVANCED CONTROLS

SmartScan wireless mesh network technology provides signals to control the ColourActive luminaires to provide both manual and automatic control of colour temperature.

The ColourActive Gateway communicates with the luminaires throughout the day, providing automatic, seamless transitions between colour temperatures.

Manual control is provided by a range of wall mounted touch sensitive plates and smartphone apps.

Methods of Control



OPTION 1. TIME SCHEDULE CONTROL

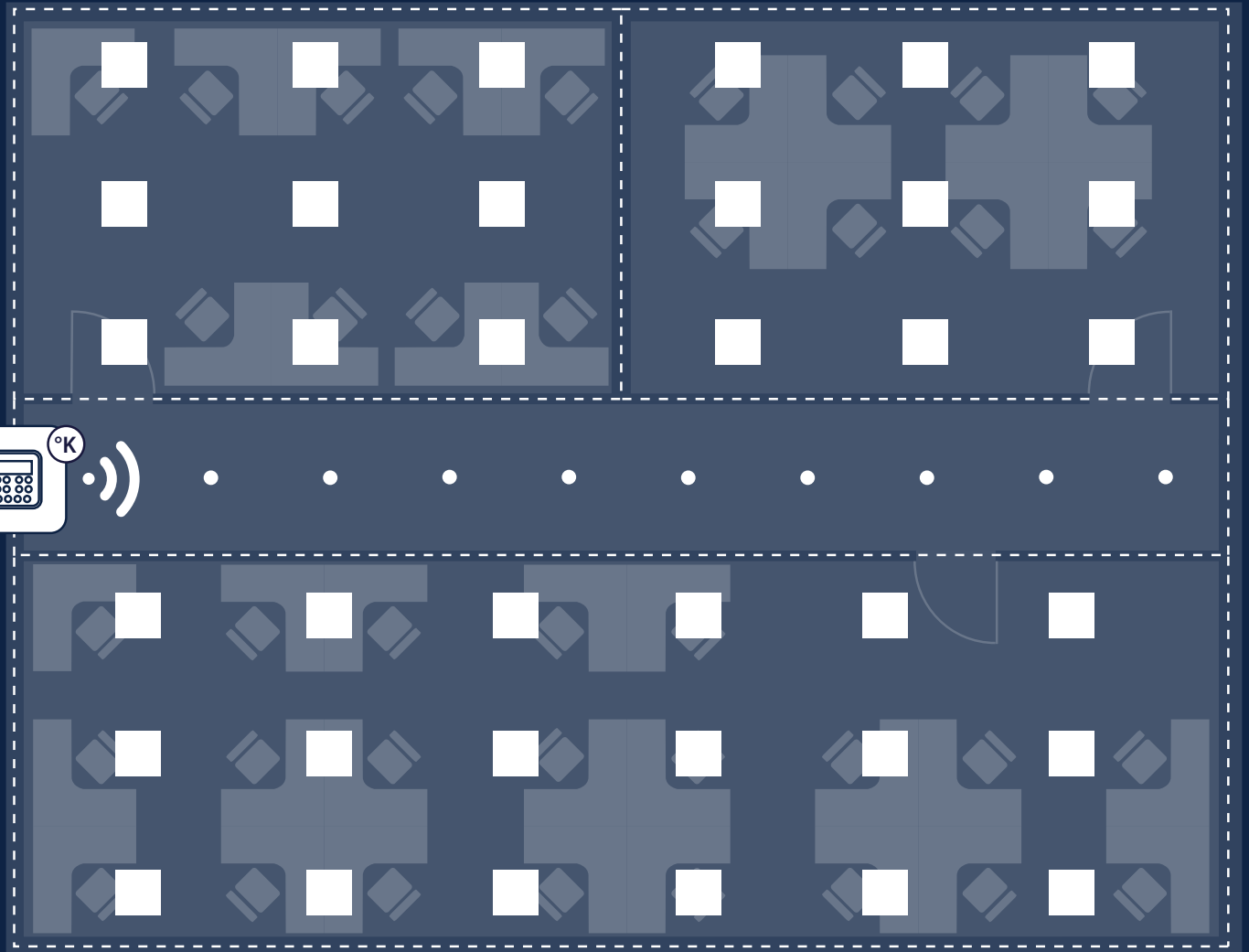
A ColourActive Gateway wirelessly provides building wide colour temperature control of ColourActive luminaires. The time schedule is configured via the Thorlux SmartScan website.

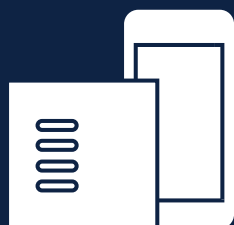


Ideal for whole buildings.

All the benefits of the Thorlux SmartScan system, plus the addition of colour temperature control.

Additional SmartScan Gateways can also be fitted for luminaire energy monitoring and status feedback.





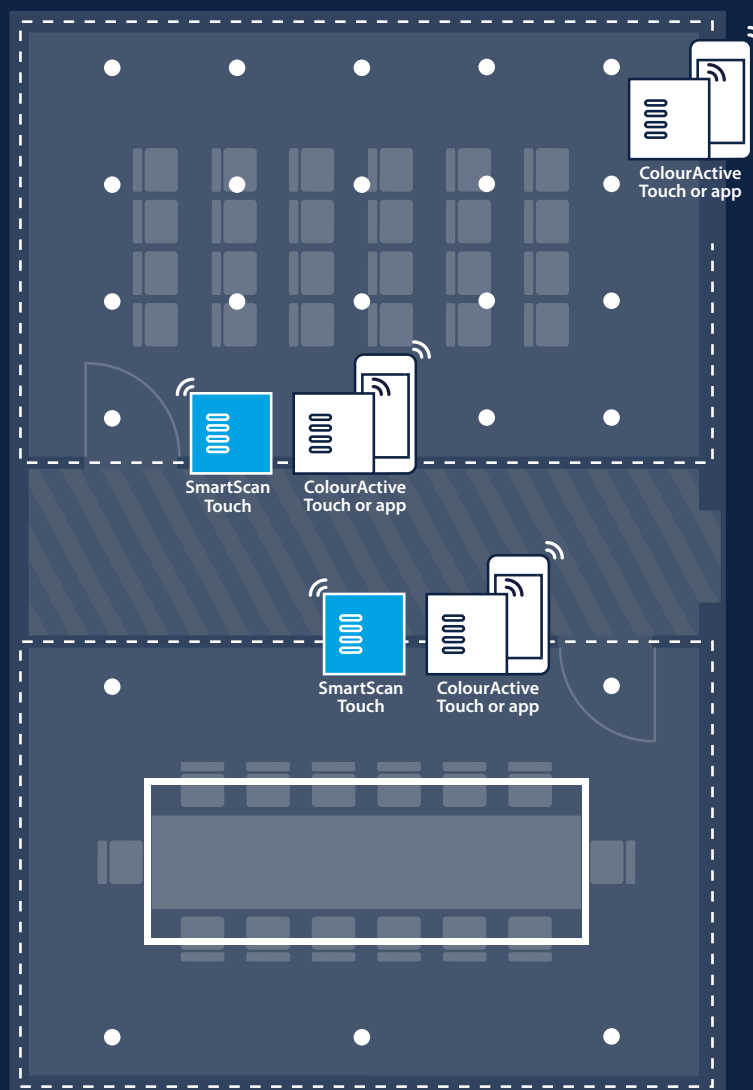
OPTION 2. MANUAL CONTROL

Ideal for small offices, meeting and conference rooms.

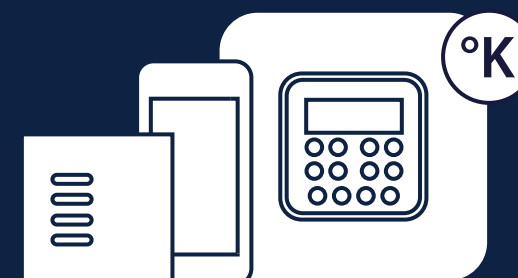
Colour temperatures are set by the user with the ColourActive Touch or the ColourActive app.

Additional SmartScan Touch plates can also be fitted for individual group scene setting and control.

Multiple ColourActive Touch or SmartScan Touch plates can be fitted in each area for added convenience.



OPTIONS 1 AND 2 COMBINED. AUTOMATIC AND MANUAL CONTROLS



Automatic and manual controls can be combined to provide maximum flexibility and convenience.

Users can override the automatic building wide settings to suit their individual needs. The system reverts to automatic mode once the area has been vacated.

How Does ColourActive Automatic Control Work?

The daily ColourActive cycle is configured via the SmartScan website. Preset regimes follow the natural daylight rhythm, or specific settings can be set and tailored as required. This gives the user complete freedom to set a colour temperature regime that suits the building's usage pattern.

Settings are transferred to the ColourActive Gateway which broadcasts colour temperature settings to all luminaires every few minutes, ensuring seamlessly smooth transitions throughout the day.



06:00 - 3000K



09:00 - 4000K



12:00 - 6500K



15:00 - 5000K



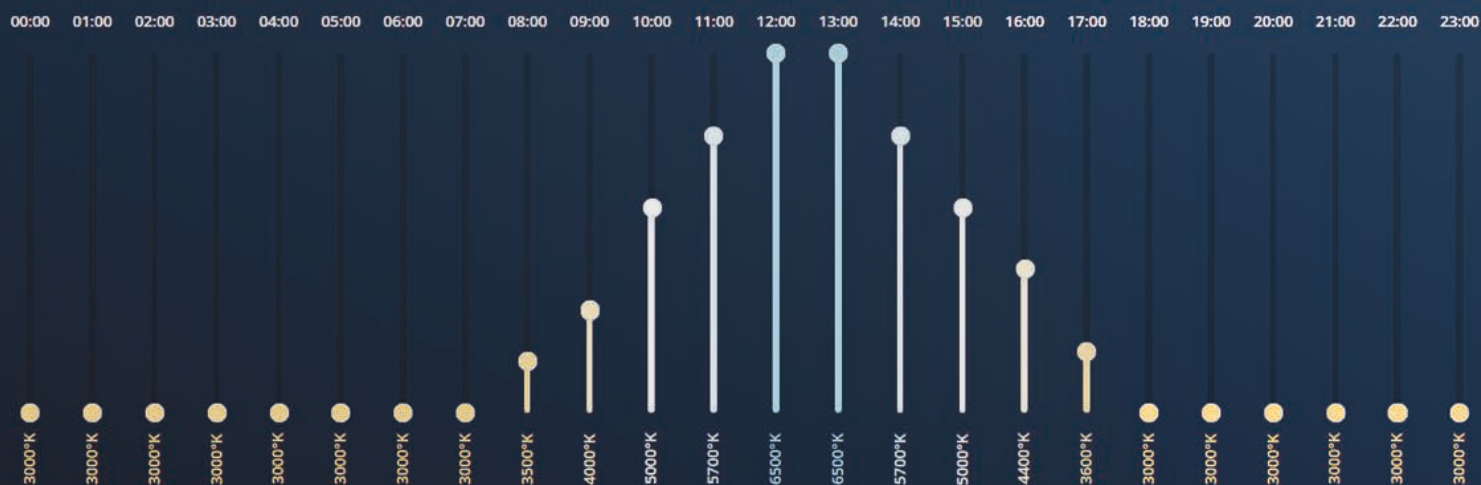
18:00 - 3000K



OFFICES



COLOUR ACTIVE SETTINGS



SAVE



Website





Website Features

Delivers full energy performance reports.

Provides emergency lighting status information.

Provides SmartScan luminaire status information.

Management of emergency lighting testing dates/times.

Management of external lighting switching times.

Provides occupancy profiling information.

Provides air quality information.

Management of ColourActive regime.

USER FRIENDLY

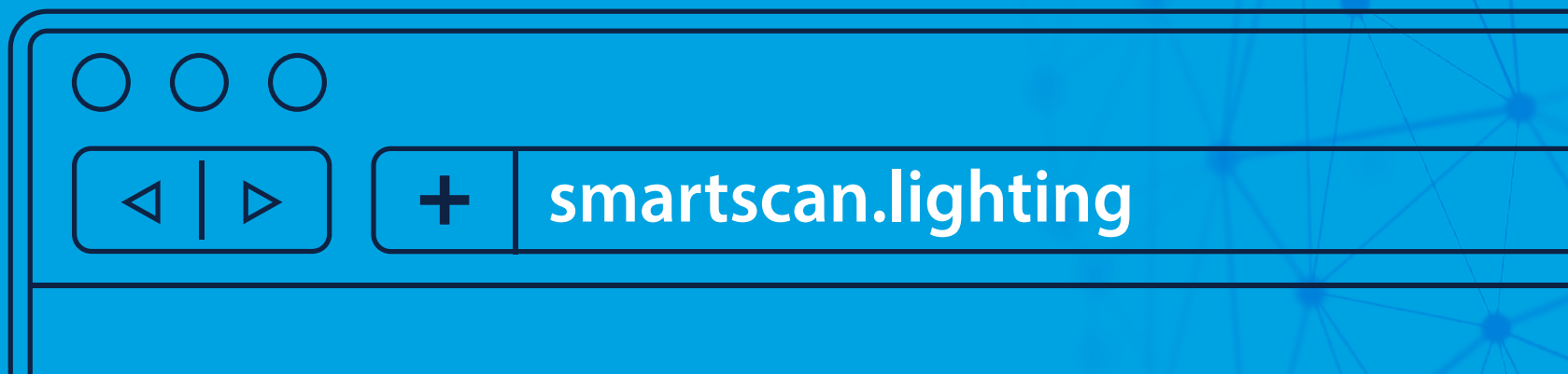
The system is accessed using a web browser, there is no need for a specific app or dedicated software.

REMOTE ACCESS

Records can be accessed remotely with a username and password.

OFF-SITE STORAGE

Energy performance data, emergency lighting testing records, occupancy profiles, air quality data, 'as fitted' drawings, Interactive drawings and commissioning certificates are stored remotely on the web server.



Full Luminaire Status Monitoring

The SmartScan Gateway provides daily uploads of the system status to the website. Secure access allows the user to view full luminaire status of the whole installation, individual groups of luminaires or individual control gear items within a luminaire.

THE WEBSITE PROVIDES AN EASY TO READ VISUAL REFERENCE HIGHLIGHTING THE FOLLOWING:

SMARTSCAN LUMINAIRES

- Mains control gear functionality
- Light source functionality
- Thermal performance (the luminaire is operating within correct temperature limits)
- Average energy used by the luminaire
- Total hours powered and operating/on

SMARTSCAN EMERGENCY LUMINAIRES

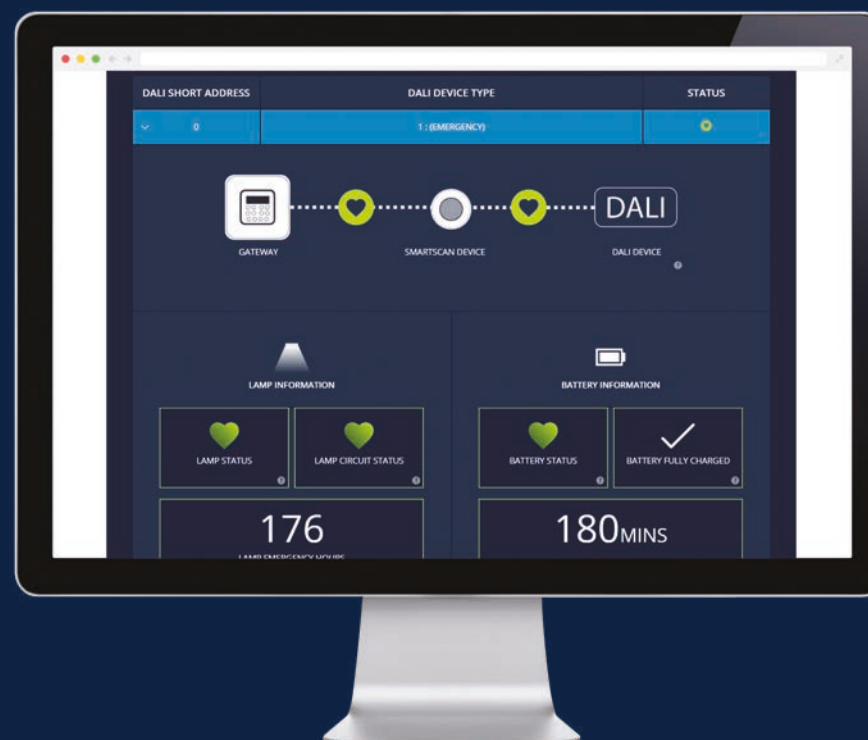
- Lamp status in emergency operation
- Number of hours that a lamp has operated from the battery
- Integral battery is connected and charging
- Result of the last monthly function test and the date of the next scheduled test
- Result of the last annual duration test and the date of the next scheduled test
- Emergency lighting testing schedules



A full history of test reports is also available to view.



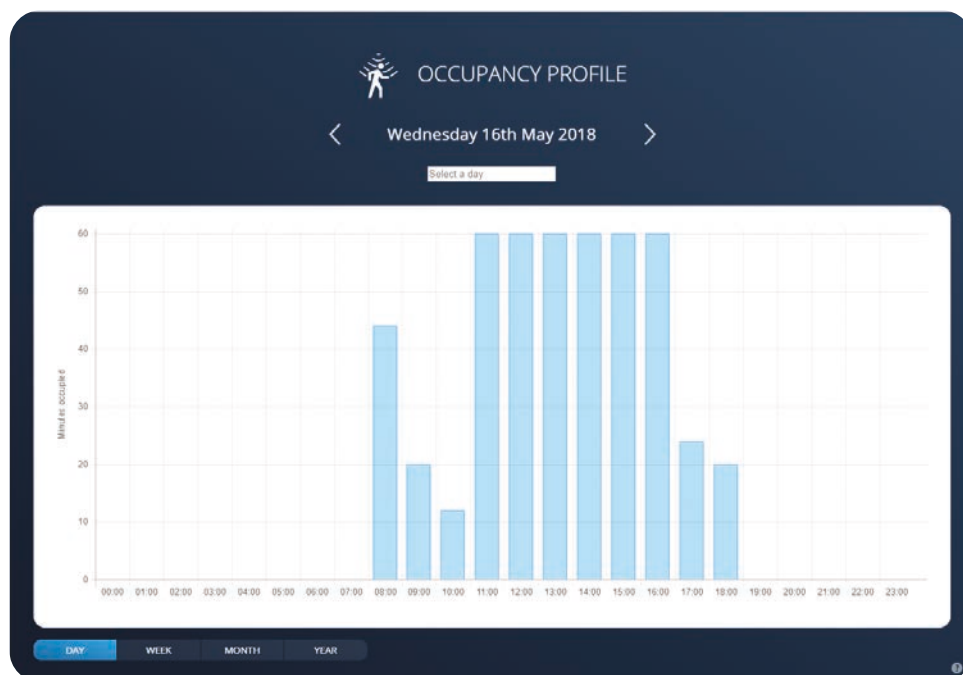
**SMARTSCAN
STATUS REPORTING**



**SMARTSCAN EMERGENCY
STATUS REPORTING**

Occupancy Profiling

Buildings are an expensive resource, both to construct and to maintain, and it is therefore essential that they are used efficiently. Consequently, building and facilities managers need to understand clearly how their rooms and spaces are being utilised. This may be, for example, to monitor the usage of teaching spaces, meeting rooms, or the frequency of access to aisles in a large warehouse.



OCCUPANCY PROFILING

SmartScan now has the ability to provide occupancy profiling information. The data collected from the SmartScan Sensor, incorporated into the luminaire, can be used to monitor room occupancy even when the lamp is turned off.

HISTORIC

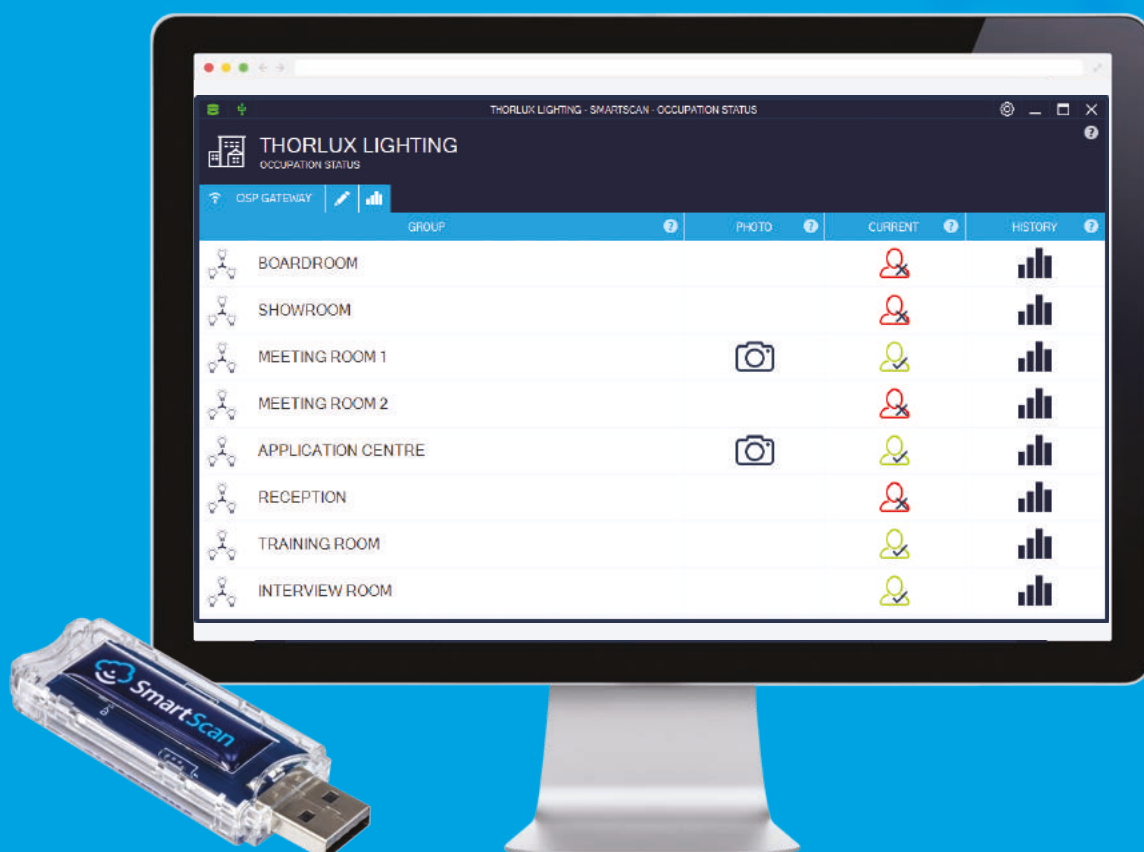
OCCUPANCY PROFILING

Each day occupancy data is gathered by the SmartScan Gateway, from every SmartScan Sensor, and included in the Gateway's status upload to the SmartScan website.

Authorised website users can view the occupancy profiles on an annual, monthly, weekly or daily basis. This data is available for groups or individual luminaires.

Key features

- No additional equipment/software is required
- Occupancy profiles are stored off-site and can be viewed at any time by an authorised user
- Reports are available for all groups and individual luminaires

**LIVE****OCCUPANCY PROFILING**

In certain applications live occupancy profiling may be required. For example, a receptionist or PA may need to know whether the board, conference or meeting rooms are occupied or vacant.

SmartScan Live Profiling allows a number of groups of luminaires to be monitored in real time, with live occupancy status displayed on a laptop or PC screen.

By using the SmartScan Occupancy Profiling software in conjunction with a SmartScan Dongle, it is possible to monitor a room's status in real time. The dongle monitors occupancy signals on the SmartScan mesh network and updates the status display instantly.

KEY FEATURES

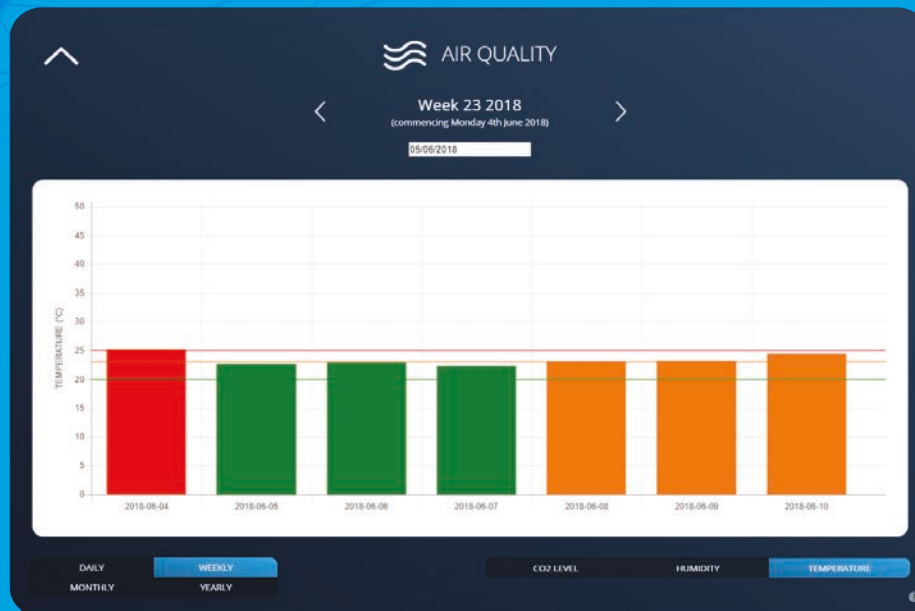
- Up to 15 groups per network can be monitored
- More than one live profile setup may be installed on the same network to allow monitoring by multiple users

Note: When Occupancy Profiling is enabled (live or historic) a maximum of 250 luminaires can be connected to the Gateway.

Air Quality Sensing

Research shows that air quality has an impact on health, and could potentially affect an individual's well-being, comfort and performance in the workplace. Poor air quality may lead to symptoms such as headaches, fatigue and eye irritation.

'THINK SMART ABOUT AIR QUALITY'



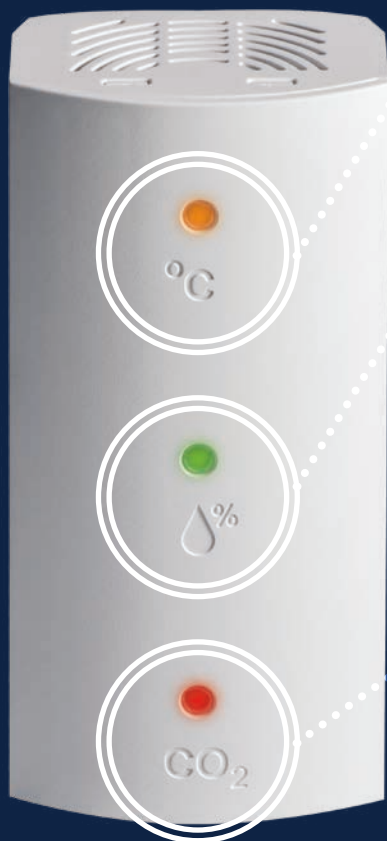
SMARTSCAN PLATFORM 2 AIR QUALITY RECORDING

Each day air quality data is gathered by the SmartScan Gateway from every SmartScan Air Quality Sensor and included in the Gateway's status upload to the SmartScan website.

Authorised users can then view the air quality profiles as an annual, monthly, weekly or daily report. This data is available for groups and/or individual sensors.

Key features

- No additional software is required
- Air quality records are stored off-site and can be viewed at any time by an authorised user



°C TEMPERATURE

Temperature greatly influences an individual's comfort level, affecting mood, performance and work-place productivity. Comfortable temperature ranges will depend upon the usage of the space.

% HUMIDITY

Humidity needs to be within a range of values for the environment to be comfortable and to promote good health. If the humidity levels are too low, individuals may experience dryness and irritation to the skin, eyes, throat and nasal passages. Conversely, high humidity levels promote the growth and accumulation of mould spores, bacteria and dust mites, potentially leading to allergies and respiratory inflammation. Humidity is also linked to temperature, so that at lower temperatures, higher humidity levels can be tolerated.

CO₂ CARBON DIOXIDE

CO₂ levels over 1000ppm create a "stuffy" atmosphere, causing individuals to feel lethargic and sleepy, lowering concentration levels and reducing work-place performance. The cause of CO₂ build-up is often inadequate ventilation and/or air circulation within a space. Increasing the ventilation will bring in fresh air and dispel accumulations of CO₂.

SMARTSCAN AIR QUALITY SENSOR

The SmartScan Air Quality Sensor monitors three key parameters: Temperature, CO₂ and Relative Humidity.

Coloured LED indicators within the sensor provide live status information for each parameter, enabling users to take remedial action if necessary. Summary air quality data is included in the daily status upload to the SmartScan web server. The Air Quality Sensor has three settings, based on the usage of the space, that can be selected as part of the commissioning process: inactive, semi-active or active.

AIR QUALITY SENSOR SETTINGS

SETTING	TEMPERATURE	HUMIDITY	CO ₂
 INACTIVE Typical Applications: Care Homes, Offices	● >26°C	● >70%	● >1000 ppm
	● 24 -26°C	● 51-70%	● 800-1000 ppm
	● 20 -24°C	● 25-50%	● <800 ppm
	● <20°C	● 20-25%	
		● <20%	
 SEMI-ACTIVE. Typical Applications: Warehouses, Factories, Retail	● >25°C	● >70%	● >1000 ppm
	● 23 -25°C	● 51-70%	● 800-1000 ppm
	● 20 -23°C	● 25-50%	● <800 ppm
	● <20°C	● 20-25%	
		● <20%	
 ACTIVE Typical Applications: Sports Halls	● >21°C	● >70%	● >1000 ppm
	● 19 -21°C	● 61-70%	● 800-1000 ppm
	● 16 -19°C	● 25-60%	● <800 ppm
	● <16°C	● 20-25%	
		● <20%	

Interactive Drawings

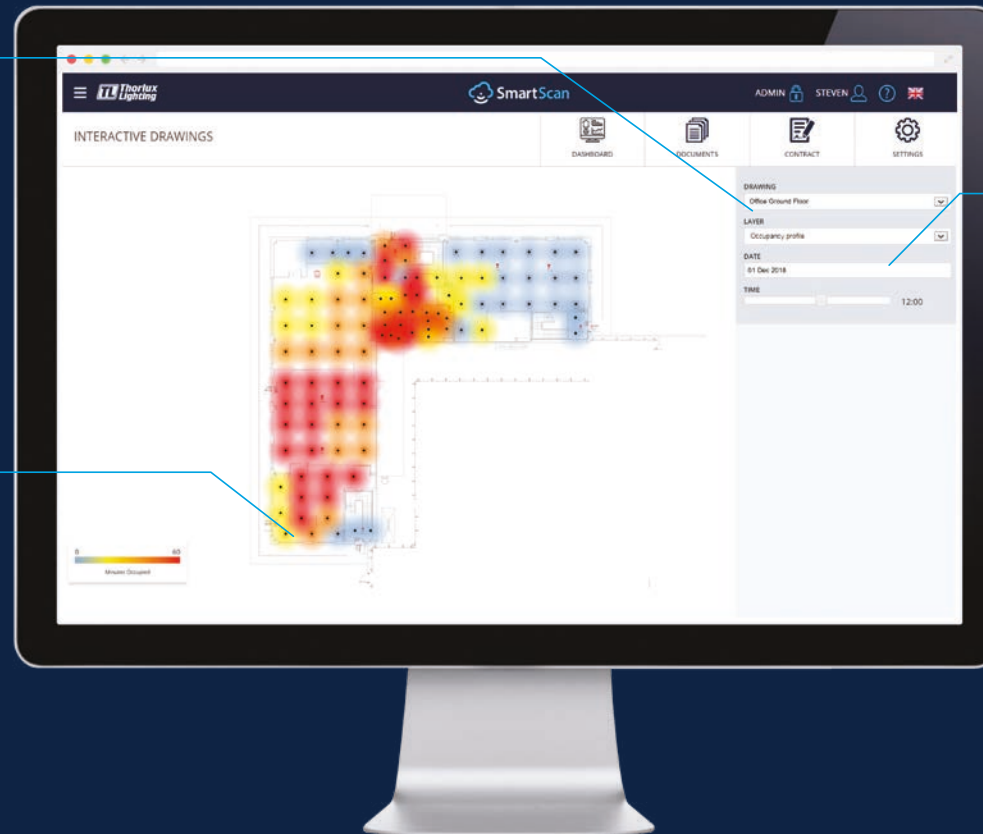
SmartScan Interactive Drawings provide a simple and effective method of viewing system information.

NAVIGATION

Each dataset is shown as a layer allowing the user to zoom in or out as needed. The user can look at data for the whole building, or focus attention on a single room or individual luminaire.

OCCUPANCY PROFILE

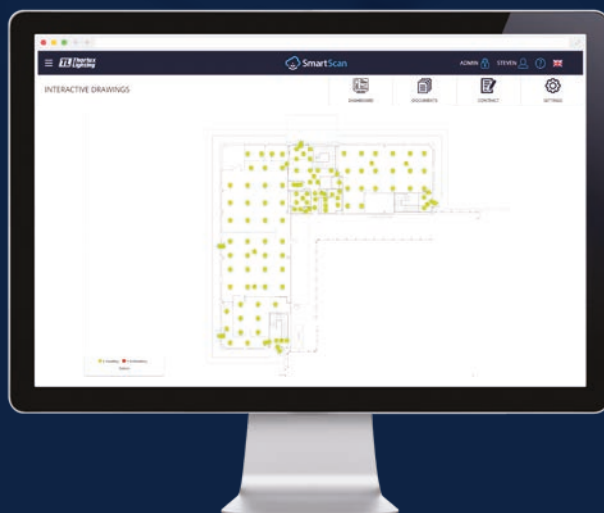
The occupancy profile for each sensor is displayed by a range of colours from grey (no occupancy) through to red (occupied continuously throughout the selected hour).



INFORMATION TABLE

If a single luminaire is selected, an information table is displayed with the data for that luminaire.

The user can select a date, then using the time slider can see how the usage pattern or performance changes through the day.



STATUS

If a luminaire requires attention the exact position is highlighted on the interactive drawing. The information table will show the status of electronic components within the luminaire.



ENERGY SAVINGS

Daily energy savings are shown by a graduated indicator – the darker the green, the greater the energy saving that day. If a single luminaire is selected, the information table shows the energy performance for that luminaire.



AIR QUALITY SENSING

Temperature, humidity and CO₂ levels are displayed with colour-coded shading. The information table displays the exact values for each sensor at any given time.

SmartScan External Lighting Time Control

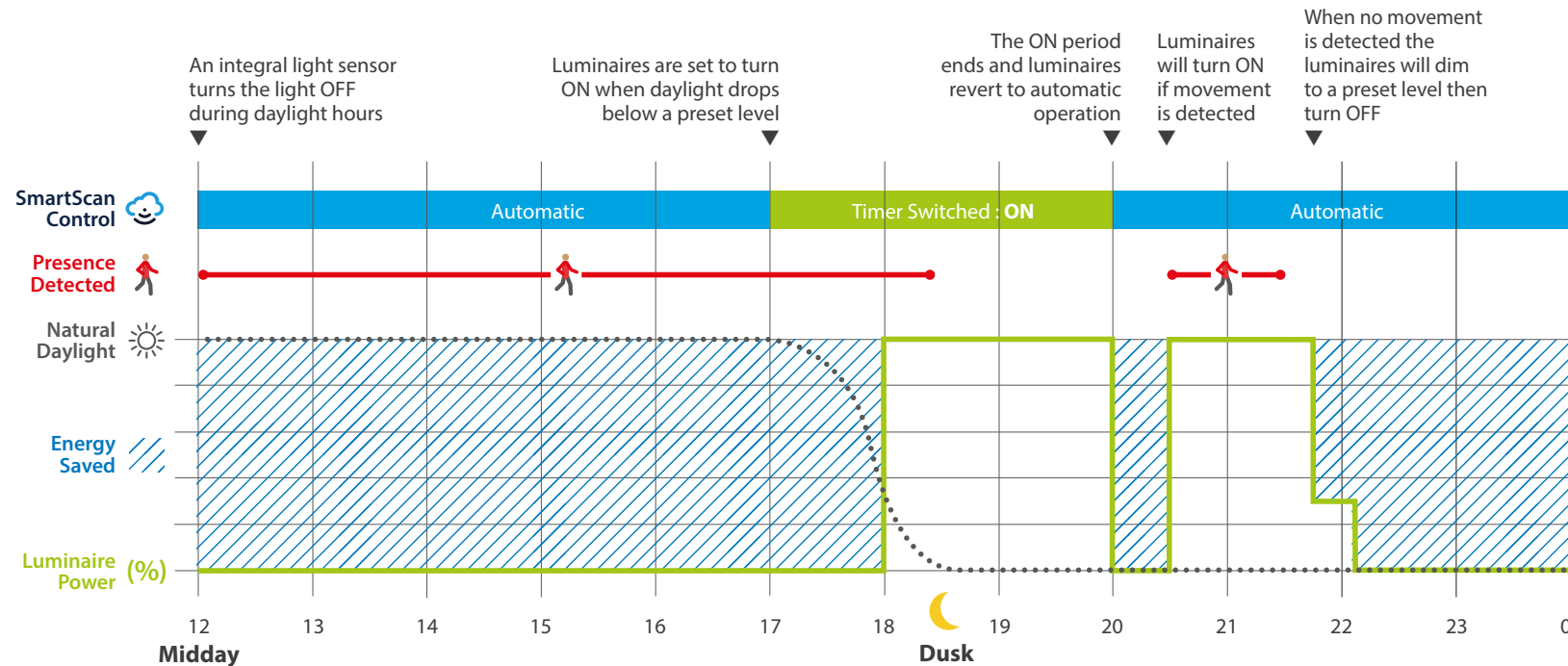


TIMES CAN BE SET ON THE SMARTSCAN WEBSITE

External lighting can be used in a number of ways, so flexibility of control is required. ON and OFF times can be set on the SmartScan website. SmartScan External groups can be configured in three ways:

- Presence detector control (default setting)
- ON between set times
- OFF between set times

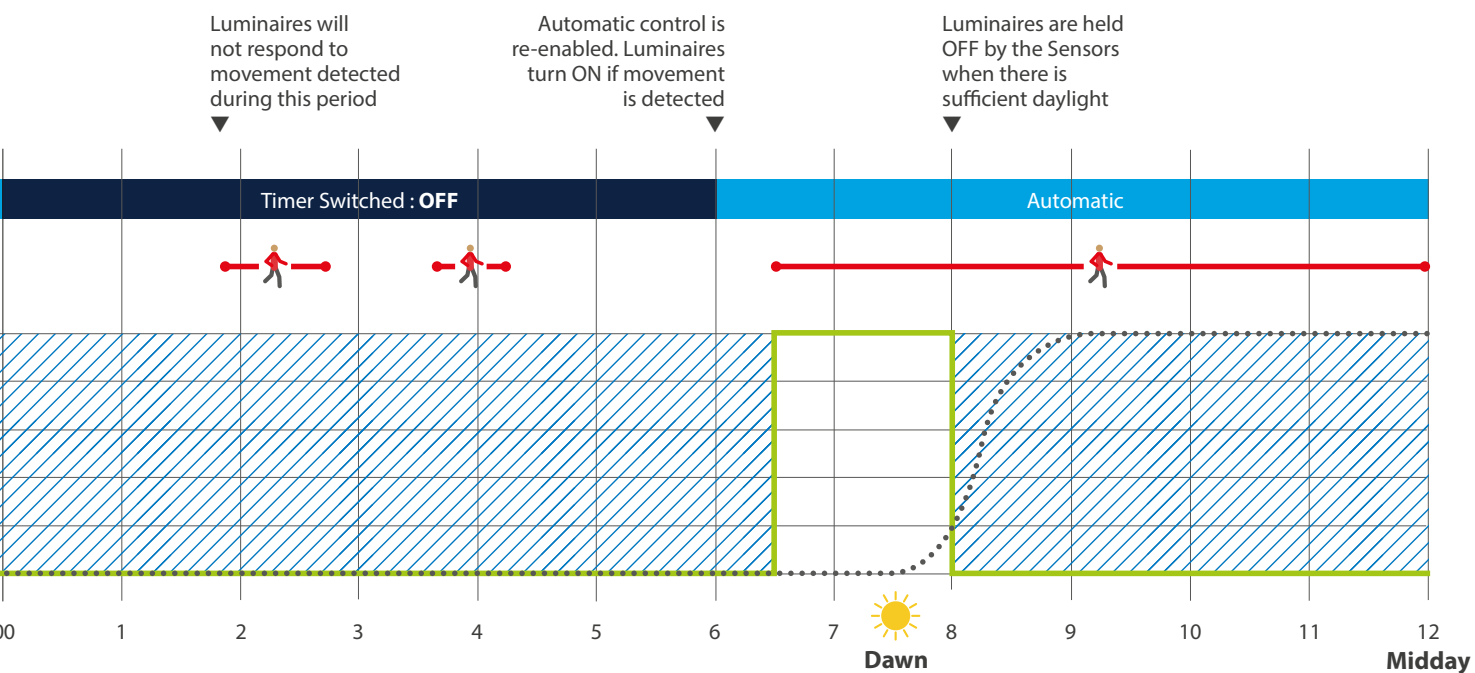
In all three scenarios, the integral light sensor ensures luminaires are OFF if there is sufficient daylight.





SMARTSCAN TIME CONTROL

In the example below, timings are set to turn the luminaires ON between 17:00 and 20:00, and OFF between 00:00 and 06:00 the following morning. Automatic presence control (with light sensor override) is enabled outside of these times.



How To Specify SmartScan Luminaires

SmartScan can be tailored to suit specific requirements.

It can be used for :-

- **Energy saving control**
- **Automatic emergency lighting testing***
- **Energy monitoring**
- **Emergency test results**
- **Luminaire status reports**
- **Occupancy profile**
- **Air quality**
- **ColourActive control**

* At Platform 1 SmartScan emergency luminaires may self-test at any time. Consequently, caution should be exercised in situations where this may be inconvenient (such as hotel rooms or hospital wards). At Platform 2 specific testing times can be set via the SmartScan website (SmartScan Gateway required).

THERE ARE SIX POSSIBLE VARIANTS OF SMARTSCAN LUMINAIRES.

1



SmartScan Internal or External luminaires

SmartScan Internal or External luminaires utilise the factory fitted SmartScan Wireless Transceiver addition to the Smart Sensor.

To specify SmartScan Internal or External luminaires, use the “**SS**” suffix (“**S**” when using a product configurator).

E.g. **RL 19069SS**

2



Integral SmartScan Emergency luminaires

A range of Thorlux luminaires are available with integral SmartScan Emergency. This involves the addition of the SmartScan Emergency Transceiver (SET) which can be mounted in many, but not all Thorlux integral emergency luminaires.

To specify integral SmartScan Emergency luminaires use the “**W**” prefix.

E.g. **WRL 19071L**



3



SmartScan Internal or External luminaires combined with integral SmartScan Emergency

Certain luminaires are available with combined SmartScan Internal or External control and SmartScan integral Emergency. The luminaire's emergency module will communicate its status via the SmartScan Wireless Sensor.

To specify SmartScan Internal or External luminaires combined with integral SmartScan Emergency, use the "W" prefix AND the "SS" suffix ("S" when using a product configurator).

E.g. **WRL 19069SS**

NOTE:
The "W" prefix must be used to specify integral wireless SmartScan Emergency.

4



Dedicated SmartScan Emergency luminaires

A range of Thorlux luminaires are available with inbuilt wireless technology.

These luminaires are specified as SmartScan Emergency by using the "W" prefix.

E.g. **WLX 17463**



Dedicated SmartScan emergency luminaires benefit from a 5 year battery warranty.

5



SmartScan ColourActive luminaires

SmartScan ColourActive luminaires utilise the factory fitted SmartScan Wireless Transceiver addition to the Smart Sensor, combined with tuneable white DALI drivers and dual channel LED circuit boards.

To specify a SmartScan ColourActive luminaire please refer to www.thorlux.com/colouractive to see a list of available products.

ColourActive luminaires have a "CA" suffix as well as a unique part number.

E.g. **JUB 18801CA**

6



SmartScan Radar luminaires

A range of Thorlux luminaires are available with integral SmartScan Radar technology.

These luminaires are specified with an "R" suffix.

E.g. **PS 17312R**

A list of SmartScan Radar compatible luminaires can be found here: www.thorlux.com/smartscan-radar





SmartScan Specification

Each luminaire shall be equipped with an 'intelligent' electronic sensor providing movement detection, light level sensing and an infra-red receiver for programming and remote control. Luminaires shall be capable of being linked together to form motion groups. Linking shall be possible wirelessly using an 868/922 MHz transceiver. Movement detected by one sensor will be signalled to all other sensors in its group. No bus power supply or other ancillary control devices will be required to facilitate such operation.

Sensors shall be capable of 'absence' mode operation in conjunction with a scene control plate or infra-red handset.

Each sensor shall provide individual dimming of the luminaire and maintain a set illumination level. Grouped dimming shall not be acceptable for daylight control. Sensors shall be fully programmable and reconfigurable using a hand held infra-red programmer. The programmer shall be capable of reading back and displaying current sensor settings and power/maintenance monitoring information from individual luminaires. Monitoring can be reset by the user. Sensors to be capable of operating DALI and DSI digital drivers.

Emergency luminaires shall be self-test with built in wireless capability, operating on the same wireless network as the standard intelligent luminaires. Tests can be initiated using an infra-red programmer as well as retrieving emergency operational status information.

The system shall be monitored by a central wireless Gateway. This device will upload system status and energy performance to a website for users to view in a graphical format.

Wireless connectivity

Luminaires shall be capable of being inter-connected wirelessly. Operational frequency shall be 868/922 MHz with low data rates - less than 1%. The system shall work on a mesh networking principle. Programmable settings can be altered from floor level using an infra-red programming device.

'Touch' scene control

Sensors shall be capable of responding to scene controls from a wall-mounted touch sensitive control plate or a hand-held remote controller. Each sensor shall be individually programmed and reconfigurable for each scene. The system shall be capable of setting either fixed scenes which are a percentage of full output, or automatic scenes which will maintain an illumination level expressed as a percentage of the standard light level setting.

Scene control plates shall be of the capacitive sensing type. Each function shall have a status LED that will display the current system status. Scene plates shall be printed to suit the application, and matching infra-red remote controllers shall also be available. Remote controllers should be supplied with wall brackets and optional locking mechanisms.

Each control group shall be capable of using multiple scene control plates and its current setting will automatically display on all scene plates. When the area is vacated, the whole system should automatically revert to 'ECO' energy saving mode.

Addition of non-intelligent 'slave' luminaires

The system shall be capable of switching non-intelligent 'slave' luminaires based upon movement detection of the main group of intelligent luminaires and shall be capable of being reconfigured for all conditions - i.e. normal (automatic/ECO) operation, scene and vacant conditions.

Emergency luminaires

Emergency luminaires shall be self-contained LED type, capable of communicating status via the wireless mesh network to the Gateway. System test times and other parameters shall be programmed via the website, this information shall be automatically downloaded to the Gateway. The Gateway shall control all emergency testing and reporting automatically.

Website system monitoring

All luminaires shall report status to the Gateway once per day. This will include failure status, energy performance data, occupancy profile and air quality information. These records shall be uploaded to a website periodically where the data will be stored securely and displayed in graphical format. The website will also store supporting site documentation including 'as fitted' drawings, interactive drawings, commissioning certificates and any other documentation required by the end user.

SmartScan ColourActive luminaires

Luminaires shall use dual-populated PCBs with both 3000K and 6500K LEDs. All luminaires shall be fitted with dual channel DALI device type 8 control gear, fully compatible with BS EN 62386-209:2011, so that the outputs can be mixed to create a range of colour temperatures from 3000K to 6500K

Colour temperature automatic control

A single wireless-enabled colour temperature control Gateway shall provide full automatic control for the installation. A secure, dedicated graphical web page, accessible only to authorised users, shall allow colour temperatures to be assigned to specific times of day. It shall be possible to select a preset schedule and also to save configurations as user-defined presets. It shall be possible to automatically limit the rate of transition so that colour temperature changes are imperceptible to the user.

The colour control Gateway shall wirelessly communicate with all compatible luminaires using 868/922 MHz transceivers and mesh network technology.

Radar luminaires

Radar luminaires shall be supplied with an integral 24GHz high frequency sensor providing presence/absence control combined with photocell operation. The photocell shall still be able to measure ambient levels of natural light ingress whilst the lamp is illuminated. The Radar sensor shall be equipped with wireless technology to allow zonal switching control and status retrieval via the wireless mesh network to the Gateway.

Colour temperature manual control

Sensors shall be capable of responding to colour temperature controls from a wall-mounted touch sensitive control plate or a smartphone app, available for both iOS and Android operating systems. The touch sensitive control plate shall offer selectable outputs of 3000/4000/5000/6500K.

Colour temperature control plates shall be of the capacitive sensing type. Each function shall have a status LED which shall display the current system status. Each control group shall be capable of using multiple scene control plates and its current setting will automatically display on all scene plates. When the area is vacated the whole system shall automatically revert to automatic global colour setting.

The smartphone app shall use a dedicated USB dongle with on-board wireless capability to interface with the mesh network.

It shall offer the capability of manually selecting colour temperatures in a range from 3000K to 6500K in steps of 100K.

The smartphone app shall be capable of combining SmartScan scenes with set colour temperatures to produce location-specific scenes which set colour temperature and lumen outputs.

Environmental credentials

The manufacturer shall be independently certified to ISO14001. The manufacturer's processes shall be carbon offset via a quantifiable carbon offsetting scheme and shall include emissions from the lighting manufacturer's vehicles used for delivery and other project associated mileage.

Short specification text

Intelligent luminaires to be fitted with integral Smart sensor providing daylight harvesting, maintained illuminance, presence/absence detection and scene setting. The system shall be capable of group presence communication ensuring luminaires can illuminate in groups and with individual scene setting control using 868/922 MHz wireless mesh connectivity with building wide link address capability. System to include seamless integration of wireless emergency lighting luminaires. All aspects are to be programmable from floor level using an infra-red remote control programmer. The system to provide daily maintenance status reports, energy performance data, occupancy profiling information and air quality data for viewing on remote website with the capability to store drawings and documentation.

Download specification text from:
www.thorlux.com/smarts cantext

Lighting Cable Management

Recessed SmartScan luminaires are manufactured with fitted 'plug and play' TEE connectors to accept factory made and tested interlink leads.

This approach, often referred to as modular wiring, provides a fast, error free installation and overall lower total system costs. A range of additional lighting control components can easily be added to the system to customise the installation to the user's requirements.



SPECIFICATION

- Thorlux UK designed and manufactured
- LS0H - low smoke zero halogen cables
- Leads can be plugged together to extend wiring
- Future flexibility - plug and play
- Twin latch design - strong strain relief
- Constructed from flame retardant nylon
- Compliance with new standard BS EN 61535:2013



**TWIN LATCH DESIGN -
STRONG STRAIN RELIEF**

**CONSTRUCTED FROM
FLAME RETARDANT NYLON**

**LSOH - LOW SMOKE
ZERO HALOGEN CABLES**

Fixed wiring feed

- Recommended load - 5 amps maximum
- 20 luminaires
- Recommended fuse - MCB 10A TYPE C

LUMINAIRE

LUMINAIRE

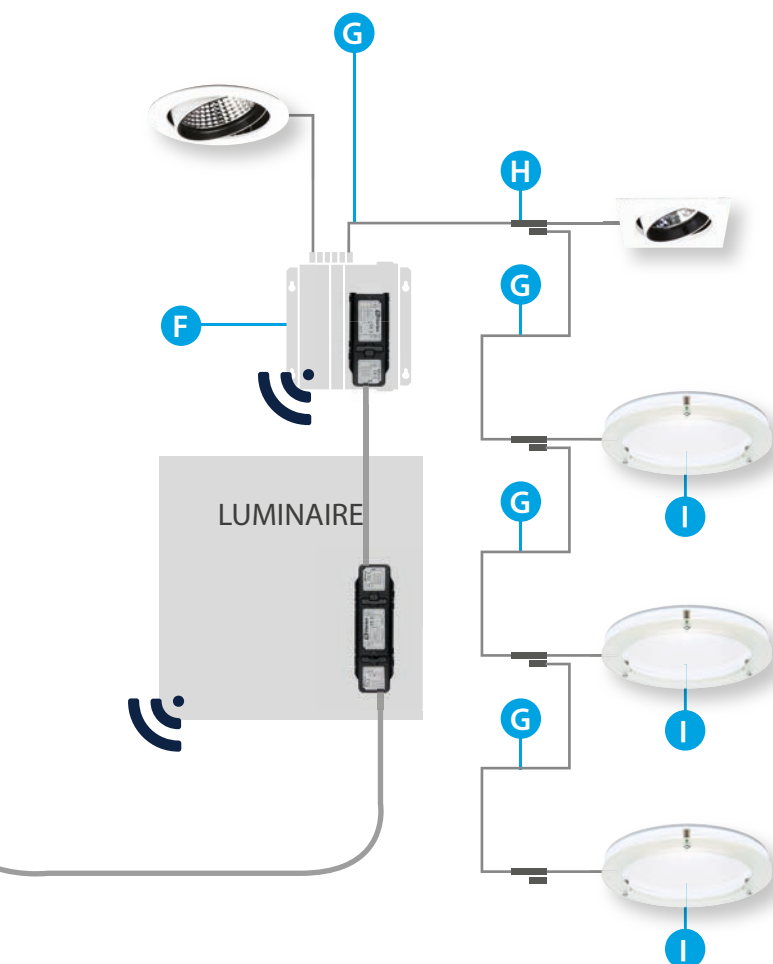
LUMINAIRE

Separate mains feed

LUMINAIRE

Smart Switch

Smart Switch



RANGE

REF	DESCRIPTION	CAT. No.	APPROX. kg
A	Starter lead - 3-pole mains plug with 3-core input cable stripped at one end 1.5mm ² - 3m	LCM 18273	0.39
B	Factory fitted 3-pole TEE connector (suffix Thorlux luminaire catalogue number with TEE3 , standard factory fitted to recessed SmartScan luminaires)		
C	Connection lead - 3-pole connectors with 3-core cable 1.5mm ² - 3m	LCM 18270	0.61
C	Connection lead - 3-pole connectors with 3-core cable 1.5mm ² - 4m	LCM 18271	0.78
C	Connection lead - 3-pole connectors with 3-core cable 1.5mm ² - 6m	LCM 18272	0.95
D	Firefly with 3-pole TEE connector - Area	WFF 17490TEE3	0.6
D	Firefly with 3-pole TEE connector - Corridor	WFF 17491TEE3	0.6
D	Firefly with 3-pole TEE connector - Standard	WFF 17492TEE3	0.6
E	SmartScan Touch - Regular	SS 17700	0.08
E	SmartScan Touch - Teaching	SS 17701	0.08
E	SmartScan Touch - Meeting	SS 17702	0.08
F	SmartScan Hub (Modular Wiring Type)	SS 17718TEE	1.1
G	Hub extension lead - 3-pole connectors with 3-core cable 1.5mm ² - 3m	LCM 14823	0.16
H	Circuit splitter	LCM 14928	0.02
I	Luminaire factory fitted with a 1m Smart Hub lead and circuit splitter (suffix Thorlux luminaire catalogue number with SHL)		
J	Smart-Remote infra-red handset	LCM 13479B	0.08
K	Smart Scene handset - Regular	LCM 14816	0.08
K	Smart Scene handset - Teaching	LCM 14817	0.08
K	Smart Scene handset - Meeting	LCM 14818	0.08

For full details of wiring systems and lighting control products visit www.thorlux.com/controls

SmartScan Gateway



SmartScan Gateway Lite



MASTER CONTROL AND
WEB INTERFACE WITH SMARTSCAN
WIRELESS COMMUNICATION



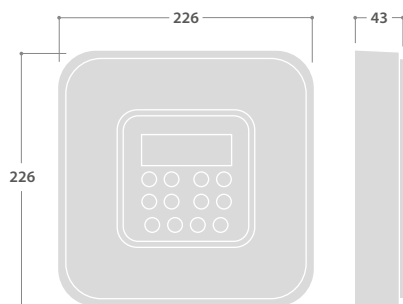
SPECIFICATION

- Polycarbonate body finished white (RAL9016), silicone keypad
- Central control for up to 250 Smart and emergency luminaires. Extra Gateways can be fitted to accommodate more luminaires
- Central control for multiple groups
- Allows user to manually initiate emergency lighting tests
- Password protected
- Communicates with the SmartScan website using GSM mobile telecommunications
- Scheduled test times / dates managed using the SmartScan website

RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Gateway	SS 17486	1.0

DIMENSIONS



SmartScan Wireless Standards Compliance:
Europe: EN 300 220-1 V2.4.1 / EN 301 489-3 V1.6.1
Australasia: ACMA 2014 Radio Communication Standard 2014
Thorlux Patented Wireless Technology - GB2575724



MASTER CONTROL AND
WEB INTERFACE WITH SMARTSCAN
WIRELESS COMMUNICATION



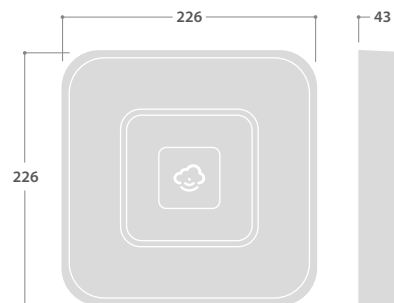
SPECIFICATION

- Polycarbonate body finished white (RAL9016)
- Central monitoring for up to 50 Smart and emergency luminaires - ideal for smaller projects
- Central time control for SmartScan External luminaires
- Communicates with the SmartScan website using GSM mobile telecommunications
- Scheduled emergency test times / dates managed using the SmartScan website

RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Gateway Lite	SS19796	1.0

DIMENSIONS





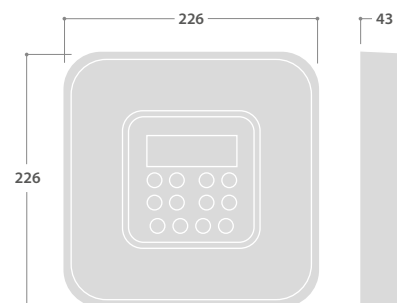
ColourActive Gateway



RANGE

DESCRIPTION	CAT. No.	APPROX. kg
ColourActive Gateway	SS 18548	1.0

DIMENSIONS



MASTER COLOUR TEMPERATURE
CONTROL AND WEB INTERFACE
FOR COLOURACTIVE LUMINAIRES



SPECIFICATION

- Polycarbonate body finished white (RAL9016), silicone keypad
- Central control for ColourActive luminaires
- Communicates with the SmartScan website using GSM mobile telecommunications
- Wireless control of incremental shifts in colour temperature governed by settings on the SmartScan website

SmartScan Wireless Standards Compliance:
Europe: EN 300 220-1 V2.4.1 / EN 301 489-3 V1.6.1
Australasia: ACMA 2014 Radio Communication Standard 2014
Thorlux Patented Wireless Technology - GB2575724

A ColourActive Gateway only provides colour temperature control. If energy monitoring and status information feedback is required an additional SmartScan Gateway is required.

SmartScan Touch

SmartScan Scene

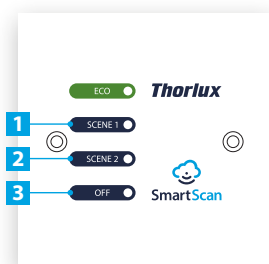
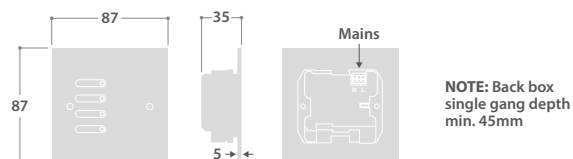


Simple and flexible scene control is provided by the SmartScan Touch wall plate or SmartScan Scene remote control handset.

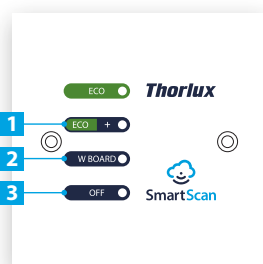
RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Touch - regular	SS 17700	0.08
SmartScan Touch - teaching	SS 17701	0.08
SmartScan Touch - meeting	SS 17702	0.08

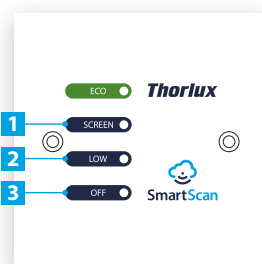
DIMENSIONS



regular



teaching



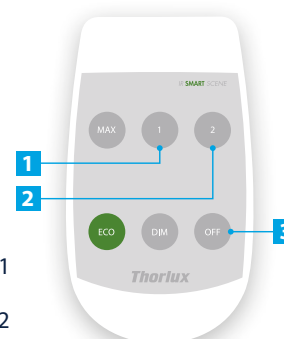
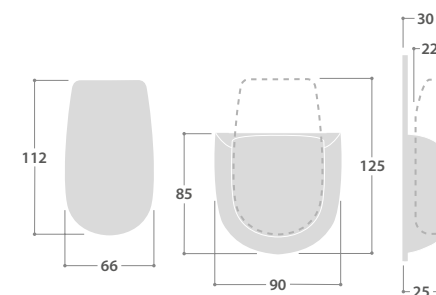
meeting



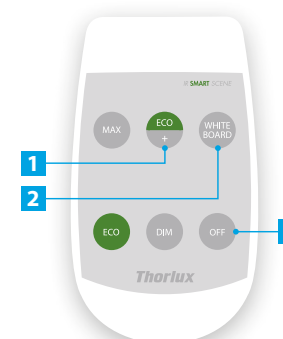
RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Scene handset - regular	LCM 14816	0.08
SmartScan Scene handset - teaching	LCM 14817	0.08
SmartScan Scene handset - meeting	LCM 14818	0.08
Locking Key Kit	ECO 9724	-

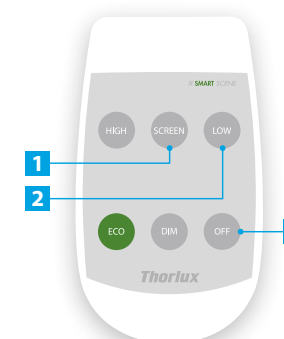
DIMENSIONS



regular



teaching



meeting

- 1 Scene 1
- 2 Scene 2
- 3 Scene 3



SmartScan Wireless Switch Module

The SmartScan Wireless Switch Module transmits wireless commands, for example on/off and scenes, to a single receiving group of luminaires. Multiple switch modules can be located in proximity of the group to suit the user's requirements for switching locations. Long life battery operation means there is no mains wiring required providing flexibility for switch locations and significantly reducing installation time and complexity.

Switches (not supplied) are wired into the SmartScan Wireless Switch Module which is located within the switch's mounting box (min 35mm deep).



The following control options are available

Eco: Energy saving mode/Activation for absence detection

Max: 100% lamp output

Scene 1: User defined lamp or light level

Scene 2: User defined lamp or light level

Scene 3: User defined lamp or light level

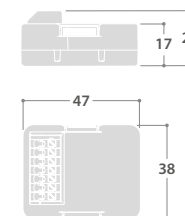
See pages 24-27 for details on scene setting parameters

Note: Lithium battery lifetime is expected to provide 10 years use for normal operation (30,000 operations). Configuration is set by using the SmartScan Programmer, see page 85 for details.

RANGE

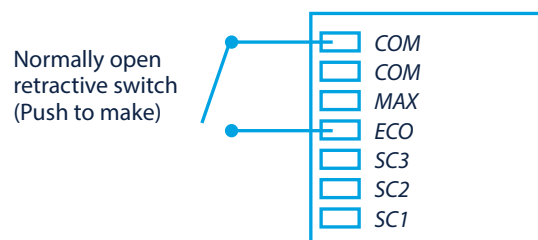
DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Wireless Switch Module	SS 20054	0.03

DIMENSIONS

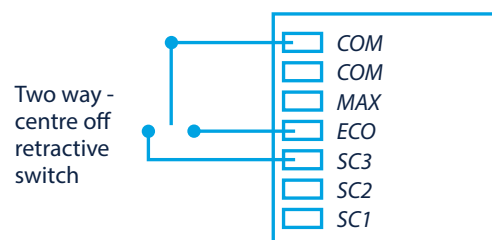


Typical Applications

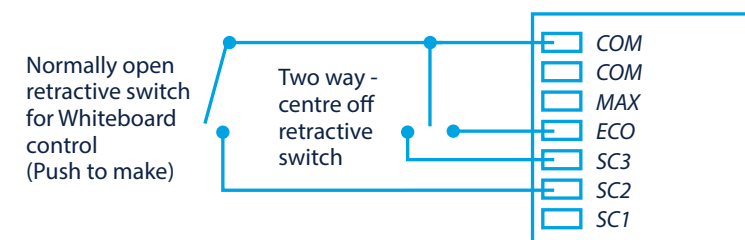
Absence Detection



On/Off Control



Classroom On/Off Control with Whiteboard Scene



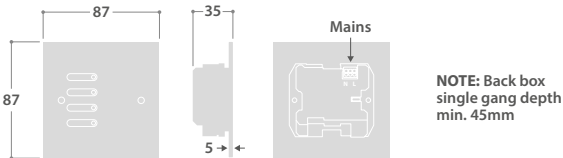
ColourActive Touch



RANGE

DESCRIPTION	CAT. No.	APPROX. kg
ColourActive Touch	SS 18547	0.08

DIMENSIONS



TOUCH SENSITIVE WALL PLATE
FOR LOCAL GROUP COLOUR
TEMPERATURE CONTROL



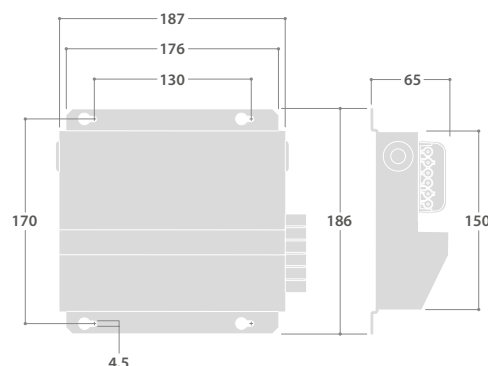
SPECIFICATION

- 5mm thick polycarbonate with capacitive touch
- Provides manual control or override of the colour temperature of the luminaires
- Multiple wall plates can be used to control each group



SmartScan Hub

Allows integration of non-SmartScan luminaires into the SmartScan system.



RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Hub - Conventionally wired	SS 17718	0.86
SmartScan Hub - Modular wired	SS 17718TEE	0.86

Non-SmartScan luminaires can be plugged into the SmartScan Hub using a factory fitted 1m connection lead (suffix luminaire catalogue number with **SHL**).

For further details see www.thorlux.com/smart



ACCESSORIES



3-way luminaire to Hub connection lead stripped at one end **0.75mm²**
(for non factory fitted luminaires)
3m - **LCM 14822**



3-way Hub extension lead **0.75mm²**
3m - **LCM 14823**

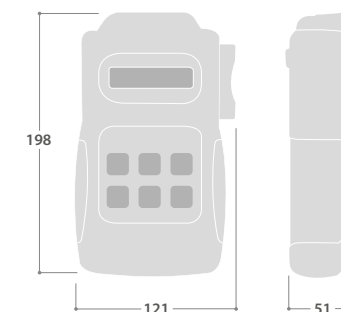


Circuit splitter
LCM 14928



SmartScan Programmer

Simple and fast setting of operational parameters from ground level.



RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Programmer - Smart Internal, Radar and Emergency	LCM 10777SS	0.6
SmartScan Programmer - Smart External	SC 14228SS	0.6

SmartScan Stand-alone Sensor



RANGE

DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Stand-alone Sensor - Recessed ■	SS 18650	0.20
SmartScan Stand-alone Sensor - Surface	SS 18651	0.32

■ Add suffix 'TEE' for pre-fitted plug & socket connections and flying lead (3m) for use with the Thorlux 6-way Modular Wiring Systems.
e.g. **SS 18650TEE**



Surface version

ENABLES CONTROL OF MULTIPLE DALI LUMINAIRES

IP40 RECESSED VERSION

IP65 SURFACE VERSION



SPECIFICATION

- Polycarbonate body finished white (RAL9016)
- Controls up to 10 DALI luminaires*
- Can be used stand-alone without connected luminaires to act as a wireless booster/range extender and/or as a slave PIR to extend detection coverage
- Class II device. Earth connection provided for looping only
- Terminals suitable for 1.5mm² looped cable
- Suitable for mounting heights up to 8 metres
- For presence detection guide see www.thorlux.com/controls

* Assuming one DALI driver per luminaire

ACCESSORY

DESCRIPTION	CAT. No.
T-bar mounting bracket for recessed version	SLA 13101

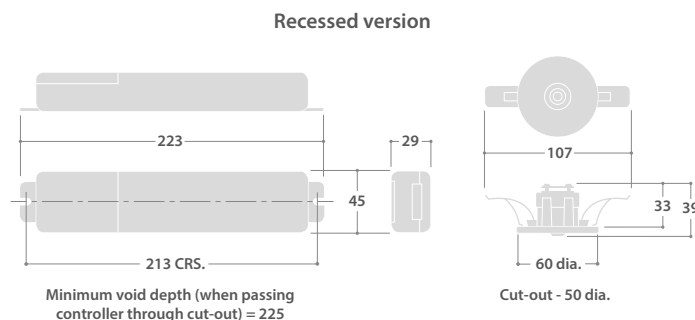
SmartScan Wireless Standards Compliance:

Europe: EN 300 220-1 V2.4.1 / EN 301 489-3 V1.6.1

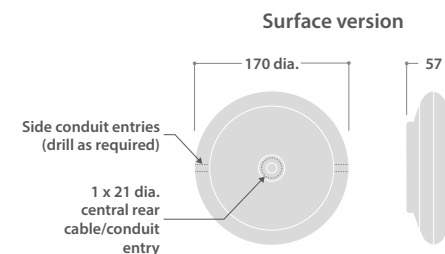
Australasia: ACMA 2014 Radio Communication Standard 2014

Thorlux Patented Wireless Technology - GB2575724

DIMENSIONS

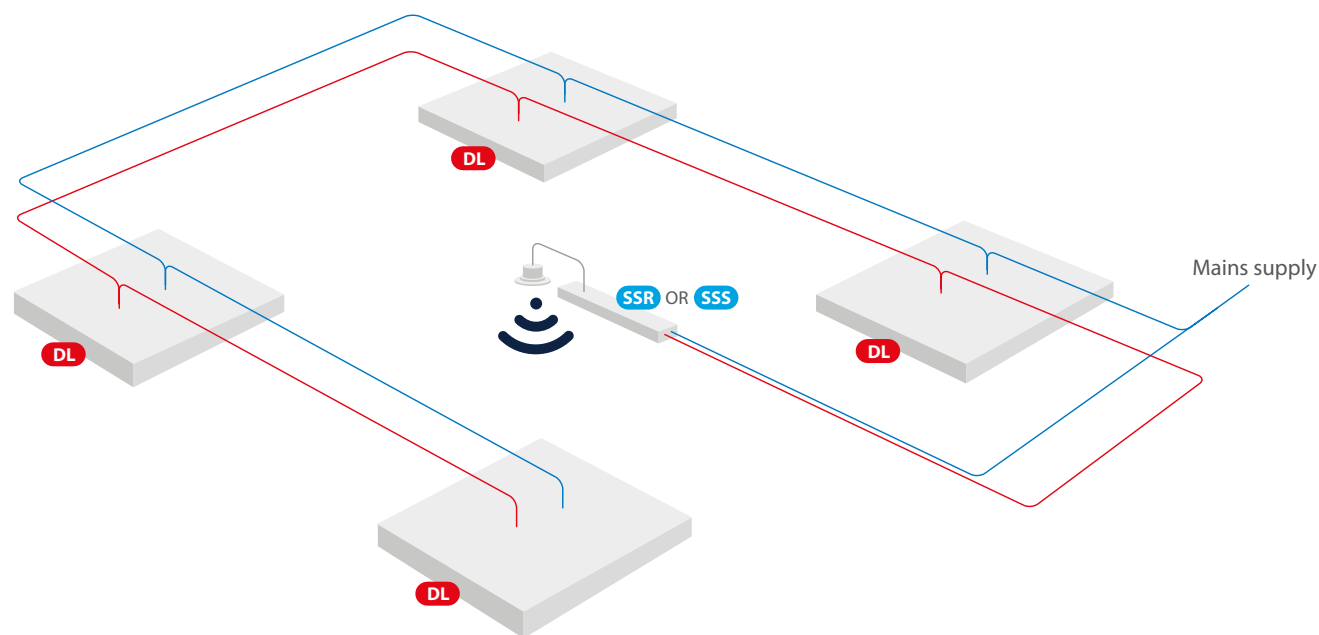


Sensor connected to controller by 900mm lead





Wiring application with recessed or surface SmartScan Stand-alone Sensor



SSR SmartScan Stand-alone Sensor - Recessed (SS 18650)

OR

SSS SmartScan Stand-alone Sensor - Surface (SS 18651)

DL DALI luminaire

— Mains 3-core

— DALI 2-core

The SmartScan Sensor will turn the luminaires on and off based on presence detection and dim according to daylight level/maintained illuminance. It will provide wireless connectivity for group control.

SmartScan Platform 2 Energy Reporting

The Stand-alone Sensor is fully compatible with SmartScan Platform 2 Energy Monitoring. The website will report the combined total circuit parameters of all the luminaires controlled by the Stand-alone Sensor.

Suitable luminaires

Luminaires must be fitted with DALI control gear (suffix Thorlux luminaire catalogue number with "A").

A maximum of 10 DALI drivers can be connected to each Stand-alone Sensor (some luminaires may have more than one driver).

NOTE: Status monitoring of connected luminaires is not available when using the SmartScan Stand-alone sensor.

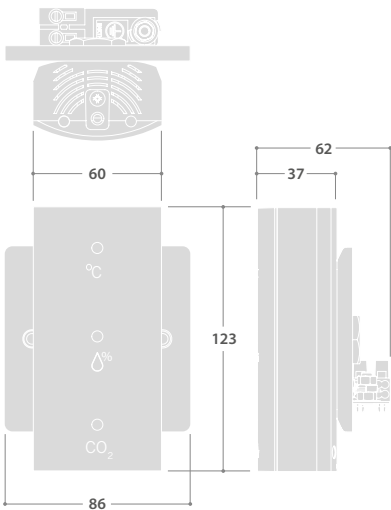
Not suitable for use with SmartScan emergency luminaires. Use Firefly or similar dedicated SmartScan luminaires.

Air Quality Sensor



Lexi fitted with
Air Quality Sensor

DIMENSIONS



INDOOR AIR QUALITY SENSOR



SPECIFICATION

- Polycarbonate body finished white (RAL9016)
- Monitors temperature, humidity and CO₂ throughout the day
- Uploads data to SmartScan website daily (Gateway required)
- Coloured LED indicators show status
- Can be supplied factory-fitted to a LEXI exit sign or stand-alone for installation on a single gang pattress

RANGE

DESCRIPTION	CAT. No.	APPROX. kg
Air quality Sensor	AQS 19181	0.15

Available pre-fitted to a LEXI exit sign. Suffix LEXI catalogue number with **AQS** e.g. **WLX17463AQS**

SmartScan Wireless Standards Compliance:

Europe: EN 300 220-1 V2.4.1 / EN 301 489-3 V1.6.1

Australasia: ACMA 2014 Radio Communication Standard 2014

Thorlux Patented Wireless Technology - GB2575724





SmartScan Dongle and Software

SmartScan Dongle



SPECIFICATION

- Enables control of ColourActive luminaires via ColourActive App.
- Enables live occupancy profiling when used with Occupancy Profiling Software
- USB dongle can be powered from a computer or dedicated USB power supply



RANGE

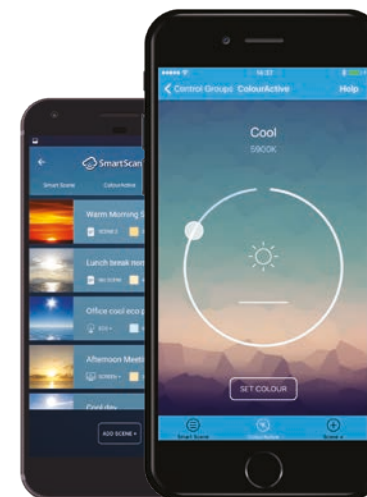
DESCRIPTION	CAT. No.	APPROX. kg
SmartScan Dongle	SS 18549	0.08

ColourActive App



SPECIFICATION

- SmartScan control of preset scenes or colour temperature (if ColourActive luminaires installed)
- Create custom scenes incorporating colour temperature settings
- App available for iOS or Android

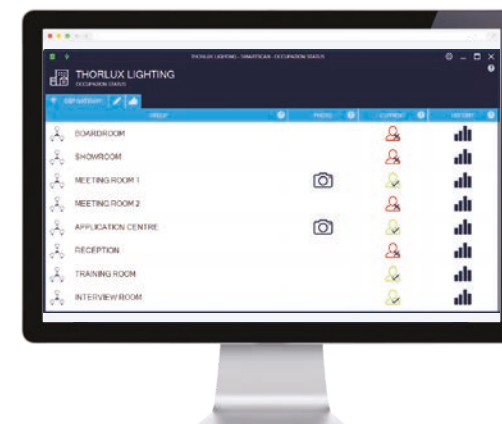


Occupancy Profiling Software



SPECIFICATION

- Monitor live occupancy of up to 15 rooms
- Available for windows PCs at www.thorlux.com/files/smartsan-installer.exe



Site Services



COMMISSIONING SERVICE

Thorlux offers a professional on-site commissioning service to ensure that SmartScan products are configured to provide the desired performance and return on investment. Commissioning begins with identifying the end-user's project requirements and ends with ensuring that the installed systems satisfy these requirements.

Commissioning of lighting is now an integral part of the requirements for new buildings and major refurbishments under Building Regulations. Paragraph L1(b)(iii) of Schedule 1 to the Building Regulations requires fixed building services to be commissioned by testing and adjustment as necessary to ensure that they use no more fuel and power than is reasonable in the circumstances.

Thorlux offers a full on-site commissioning and maintenance service using our own, highly qualified engineering team.

All engineers are Thorlux trained and hold all relevant industrial qualifications, including:

- **PASMA scaffold certification**
- **IPAF powered access operation such as scissor and boom lifts 3A and 3B**
- **Annual asbestos awareness training**
- **CSCS skills card**
- **CIS Electrical Safety card**
- **CBS criminal records check**



SERVICE PLUS

Thorlux will monitor and maintain new installations for 12 months from the commissioning date. After this period products are still covered by our standard 5 year warranty.

In addition to the standard warranty, Thorlux can offer an extended service where our engineers will continue to monitor and maintain your lighting system, this is known as Service Plus.

Service Plus offers:

- **Constant off-site monitoring of your installation by Thorlux**
- **On-site, in hours attendance by Thorlux qualified and certified engineers to rectify any system issues**
- **Peace of mind that your system is fully maintained**



SmartScan Van



On the road with the #SmartScanVan

**Bringing the SmartScan
experience to a town near you!**

**Book your demo at
thorlux.com/smartscanvan**

SmartScan demonstrations cover :-

- Internal energy saving lighting management
- External energy saving lighting management
- Tuneable white control (Circadian rhythm)
- Web based status and energy monitoring
- Emergency luminaires, testing and compliance
- Occupancy profiling
- Air quality sensing
- Interactive drawings
- ColourActive control



Designers, manufacturers and suppliers
of professional lighting systems

INDUSTRIAL LUMINAIRES
COMMERCIAL LUMINAIRES
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RETAIL AND DISPLAY LUMINAIRES
CONTROLS AND SYSTEMS

A DIVISION OF F.W. THORPE PLC

Thorlux Carbon Offsetting Project:
www.thorlux.com/trees

The information given in this catalogue is typical and must not be interpreted as a guarantee of individual product performance and/or characteristics. We reserve the right to alter specifications and designs without prior notice.

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