



SylSmart Connected



**UNLOCK
THE
INTELLIGENT
BUILDING**

DIGITAL SOLUTIONS AND SERVICES

SYLVANIA



- ✓ Decentralised operating system
- ✓ Integrated intelligence
- ✓ Rapid installation and setup
- ✓ Scalable
- ✓ Security built-in

Meeting the efficiency challenges of your building

80% of lighting installations are obsolete

30% of energy in commercial buildings is consumed by lighting

65% savings with low energy lighting and smart controls*

LEGISLATED, BUT INCENTIVISED

Around the world today, buildings have the challenge of being more efficient in many areas such as pollution, waste and energy usage. Global warming is driving the agenda for climate change, so therefore the method by which these challenges are met is very important: 1. the latest EU energy efficiency directive requires buildings to achieve an energy reduction of 32.5% by 2030, relative to a 'business as usual' scenario.; 2. This change is supported by local incentives and certification opportunities.

Making energy saving a key pillar of the operational strategy saves energy and helps make your building compliant.

THE OPPORTUNITY

According to an EU Energy research* 80% of the lighting installations in commercial buildings are obsolete, often dating back more than 20 years and which will still be in use by 2050.

In these commercial buildings, lighting represents up to 30% of the energy consumed.

By switching traditional, inefficient lighting to LED combined with smart controls, energy savings of 65% or more** can easily be achieved. The opportunity for significant savings is with lighting. But this energy saving cannot be at the expense of its occupants.



90% OF OUR TIME IS SPENT IN BUILDINGS**

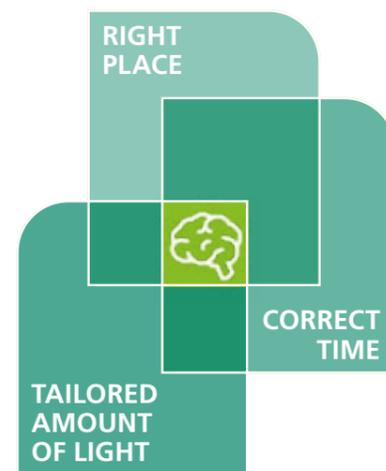
EFFICIENCY OR OCCUPANT COMFORT?

Energy saving is an important measure of how well a building operates. However, this should not be realised at the expense of the comfort of its occupants. A high performing building should promote health and wellbeing without only looking at the energy bill. Spaces must be comfortable for its occupants, as we spend 90% of our time in buildings. Striking the right balance is paramount.

Effortless intelligent lighting

SylSmart Connected is a professional smart lighting solution that is ideal for retrofit replacements in indoor commercial applications.

This unique system combines the benefits of integrated intelligence, distributed across a decentralised mesh network, ensuring maximum uptime.



SylSmart

HAS THE ANSWER

To achieve such a balance, light needs to be provided at the right amount, in the right place and at the right time. SylSmart Connected combines built-in sensors with advanced automation for intelligent control in high quality luminaires, providing a truly intelligent lighting system able to meet all three of these challenges.



SOURCE FOR FIGURES: DG ENERGY, EU ENERGY IN FIGURES, 2012.
 * REFERENCE IS: LBNL (LAWRENCE BERKELEY NATIONAL LABORATORY)
 ** SOURCE: THE NATIONAL HUMAN ACTIVITY PATTERN SURVEY (NHAPS)



The next generation of lighting control



INTEGRATED INTELLIGENCE

Unlike traditional and other smart control systems, SylSmart Connected embeds intelligence in each luminaire with a sensor that can detect occupancy, vacancy and natural light levels on a highly granular level.

These integrated sensors have reliable wireless capability, with each smart luminaire forming part of a responsive system.

Installation of SylSmart Connected luminaires is as easy as installing traditional lighting, because there are no additional wires. Motion sensing coverage is optimum due to each luminaire containing a sensor. You have precise control providing optimum comfort to the users of the building.

The system provides maximum flexibility when realigning lighting to any new space layout scheme.

BUILT-IN RELIABILITY

Most lighting systems are based on a centralised system architecture scale, often having a single point of failure.

With distributed intelligence across every lighting fixture, SylSmart Connected does not need any additional central devices in the system, as it operates in a decentralised way. Also, it doesn't require any additional wiring, simplifying the installation.

- no mandatory gateway
- minimised risk of disruption and downtime
- ease of system expansion with staged implementation
- peace of mind with built-in security

Easier installation than ever before

✓ PLAN

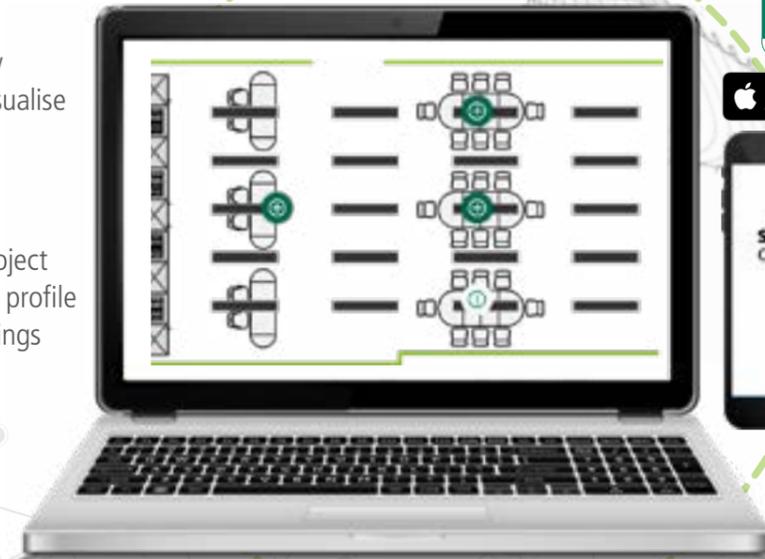
- Define your needs precisely
- Floorplan – Visualise your needs

✓ DESIGN

- Create your project
- Define lighting profile
- Craft your settings

CONFIGURE OFFSITE

SYNC



✓ IMPLEMENT

- Rapidly add devices to your network
- Accelerate commissioning

✓ OPTIMISE

- Tailor your configuration

OPTIMISE ONSITE

CLOUD

Traditional Installation

SylSmart

Dramatically reduced installation time

ACCELERATED INSTALLATION

Lighting control systems aren't always easy to implement, especially when it comes to refurbishing existing installations, or doing so within occupied spaces. With SylSmart Connected, phased installation is possible, and the installation of SylSmart fixtures is a straight-forward procedure, free of complicated steps. The configurations can be created off-site from the comfort of your office and on-site implementation is accelerated with advanced and intuitive mobile app tools. It minimises disruption to

occupants, removes unnecessary time spent on site and ensures the security and reliability of the system.

SylSmart Connected has a modular, scalable infrastructure that enables easy alignment to various project sizes and allows for staged implementations. We do all the hard work, so you don't have to.

Our Intuitive and easy to use SylSmart Connected app, with its web based and mobile based platform, will ensure a smooth installation, with optimisation as the next step.

"Because the system is plug and play by nature, it allows us to replace devices in a truly short time and also allows us to configure them per room/zone and area. This gives us the major advantage of working in specific phases in buildings, while allowing occupants to continue working. There is therefore minimal disruption to the end-user.

Regarding the commissioning of the system, I was positively surprised. I expected it to be more complex. Creating new areas or changing parameters are very intuitive. On-site technicians with the bare minimum of instructions can make necessary amendments via a smart-phone or tablet."

TINO BRACKE, PROJECT MANAGER RELIGHTING, QUINTIENS NV (VEOLIA GROUP)

Exceptional motion coverage

Granular control

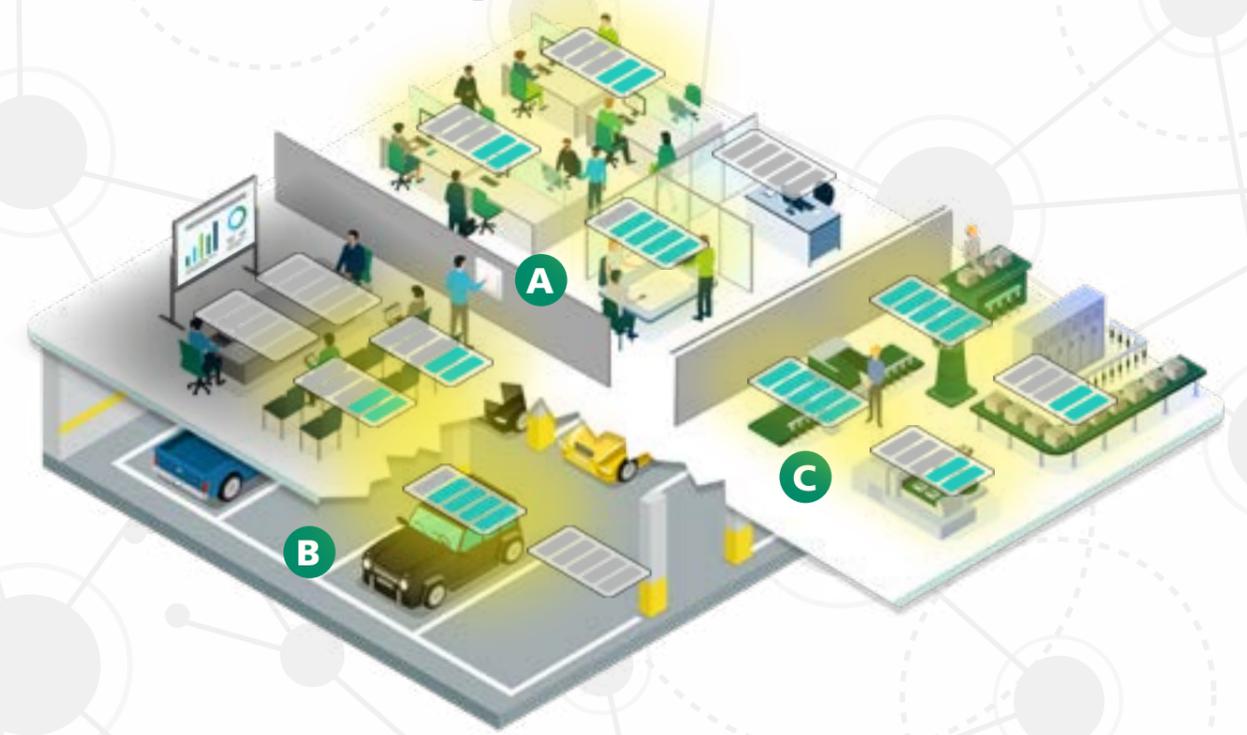
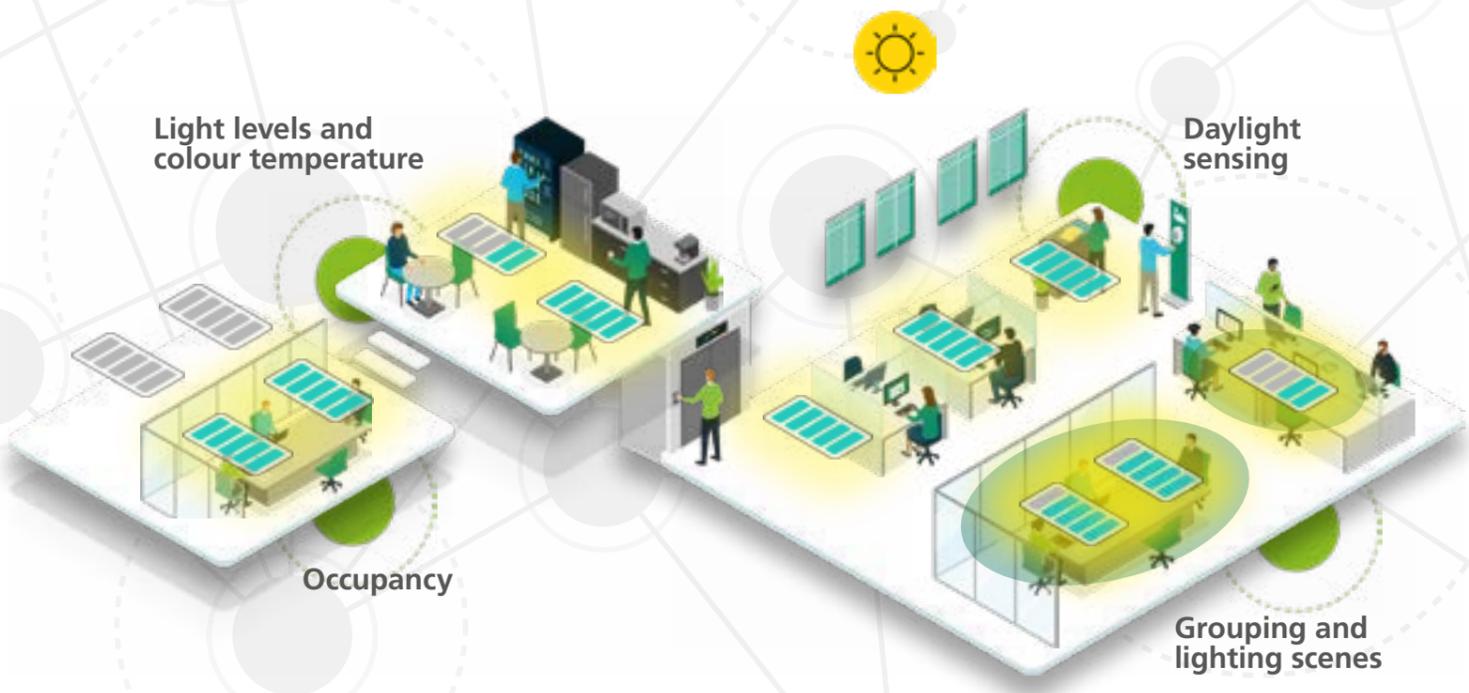
Maximum comfort

Save time

Control costs

Minimal disruption

Flawless control for functional spaces



OPTIMISED COMFORTABLE LIGHT

SylSmart Connected is a sophisticated system that has all the features expected from a modern lighting control solution:

- occupancy / vacancy
- light levels and colour temperature
- daylight sensing
- grouping and lighting scenes

EASY MAINTENANCE

SylSmart Connected is a long term investment with low running costs and even lower maintenance. Floorplans are digitally mapped for your building providing a holistic, flexible and sustainable solution that is easy to use and adaptable for changing workspaces. When office layouts are altered, you can easily reconfigure lighting, without complicated training.

You can control maintenance costs and minimise downtime and disruption for your occupants. Furthermore, your settings are securely backed-up in the cloud.

With simple training of operators, our systems require little to no maintenance; you can do it yourself.

THE RIGHT LIGHT WHERE YOU NEED IT

SylSmart Connected is suitable for all parts of the building. Whether floor wide, or building wide, it can be applied to the needs of individual spaces. This system facilitates change, helping you easily adapt to changing layouts with intuitive controls. You can quickly re-align your lighting or add to your network at any time in a rapid and cost-effective way. With SylSmart Connected, any plan can become a reality.

A Office space

Dynamic and diverse needs

Office spaces are a commonplace in buildings. How do you ensure that all occupants are comfortable, without wasting energy? With a motion and lux sensor in each luminaire, large areas can easily be sub-zoned to create groups of luminaires which can work together and provide a precise and customised lighting experience in all areas. The addition of manual control, via battery-free switches, means that users can override automatic settings to suit their individual needs and be safe in the knowledge it will work every time.

B Parking space

User-friendly and precise lighting

When using a parking space, you want the lighting to work first time, every time. When you are parking, or moving in and out of the space, you want to ensure that the lights are immediately available so that users can see their way whilst also able to see other occupants and vehicles passing through. It's also important that the lights don't get left on, so that energy isn't wasted. Custom scenes can be set along with vacancy sensing setting, that ensures that lights switch off after a set period of time or when the parking spaces are not in use.

C Industry space

Tailored light for maximum comfort & ultimate flexibility

Industry spaces are eclectic and diverse spaces featuring areas that could be used for everything from machining areas, to moving goods, packing, and sorting areas, just to mention a few. What if your lighting can be both automated and functional at the same time? With SylSmart Connected this is both possible but also easy to achieve. With features such as zoning, scenes setting, occupancy detection and daylight sensing, employees will feel safe and productive whilst in this environment.

Faster to set up

Built-in security

Emphasize visually

Highly configurable

The lighting control technology provides the right amount of light and gives occupants the ability to take control and customise the ambience, resulting in comfortable spaces.



* SOURCE: THE NATIONAL HUMAN ACTIVITY PATTERN SURVEY (NHAPS)

Built on an advanced, open and secure platform

Scalable

up to 8000 devices.

Data insights

Lighting as a Host (LAAH) ready for exciting new IOT services

Interoperable

integrate to other building systems and services.

Futureproof

easily upgradeable and supported into the future

Wireless

no new cables needed, ideal for protected buildings

Ubiquity

trusted and widely adopted communications platform

Natively reliable

using many to many multi-path messaging, no single point of failure

Integrated sensor types:

Integrated Sensorless Node (Option for all fixtures/applications)

Integrated Office Sensor (Office applications)

Integrated Highbay Sensor (Industrial application)

COPD wide sensor (Resisto only, e.g Parking application)

INTEROPERABILITY A BRIDGE TO THE FUTURE

At Sylvania we believe in open, interoperable systems. Many proprietary systems have an uncertain future – building your lighting system on this means you risk vendor lock in, obsolescence etc.

SylSmart Connected uses Qualified Bluetooth® mesh within its luminaires. This is a widely adopted open, yet secure networking solution with compatibility across various systems and you can be confident that it will continue to be supported into the future.

BENEFITS FOR LIGHTING QUALIFIED BLUETOOTH MESH

The Bluetooth® mesh networking specifications define an interoperable many-to-many (m:m) mesh networking solution for Bluetooth Low Energy (BLE) wireless technology. Ideally suited for control, monitoring, and automation systems where tens, hundreds, or thousands of devices need to reliably and securely communicate with one another.



SECURITY IS DESIGNED IN

Designed with security at its heart employing a wide range of security measures, such as cyclic keys, replay attack protection and prevention against man-in-the-middle attacks. The security is considered at all levels of the system and takes a through life approach to security.

For further details on system security go to www.bluetooth.com



Cyber Security proven by BSI Group for Internet of Things (IoT) Foundation

ALWAYS IN CONTROL – USER ACCESS HIERARCHY

Access rights: multi-tier user access management enables different stakeholders with varying responsibility to access different parts of the system with a customised view purpose designed for their exact needs.

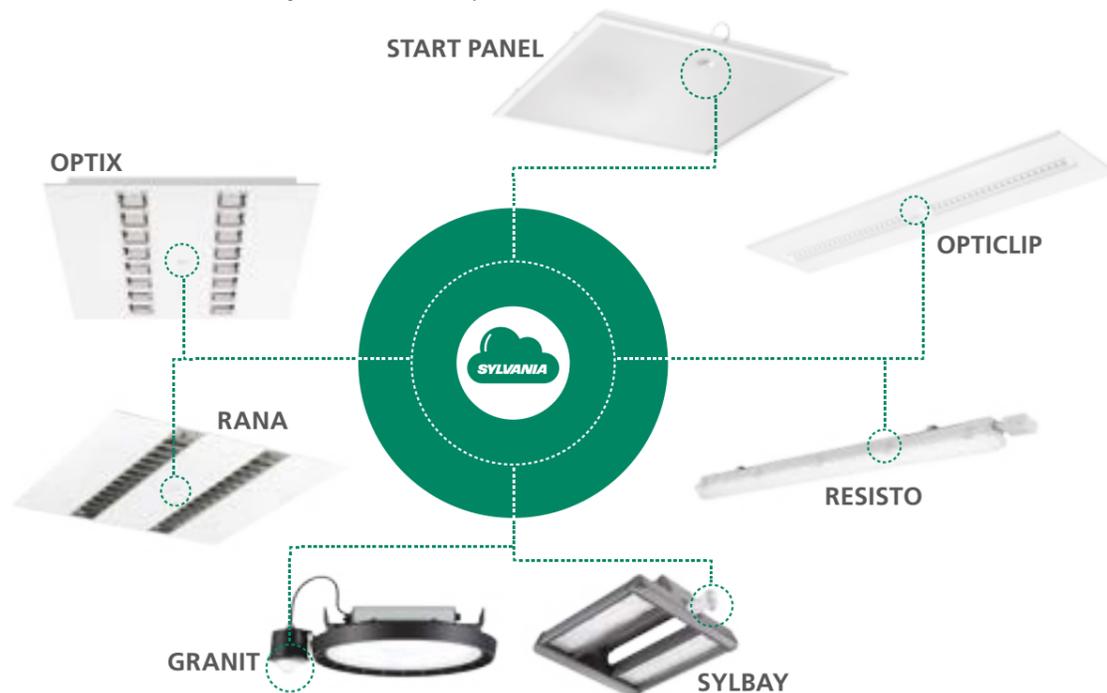
Recovery: never lose control – if you forget your account credentials, it is always possible to recover your access.



WALL SWITCH LOW BAY EMERGENCY UNIT DALI CONVERTER HIGHBAY

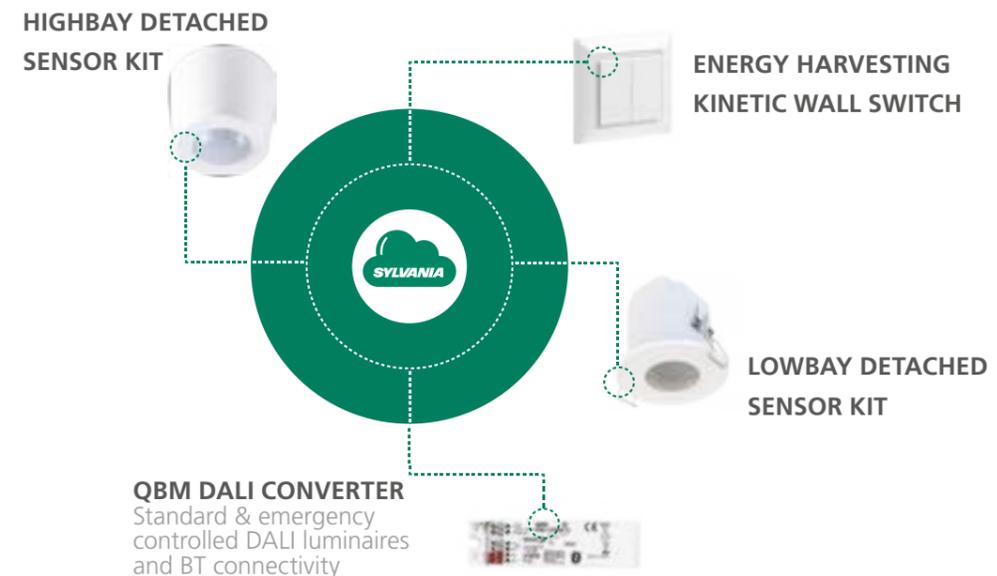
Your favourite fixtures, just got smarter

SylSmart Connected is available across a wide choice of luminaires, giving you the freedom to choose the right, easily maintained solution that won't lock you in with a specific vendor.



Wide range of supporting accessories

Extend your SylSmart system and enhance your connectivity with our range of smart accessories.



Multifunctional sensor

Exceptional motion coverage

Granular control

No additional wires required

A win-win choice for all



FACILITY MANAGER

The Facility Manager typically oversees contracts for building services, and has the responsibility to ensure the lights keep working. With access to the system using computer or smart phone, ease of use and reliability are some of the key benefits.

- ✓ Fully customisable and flexible lighting
- ✓ Reliable operation and secure user access control
- ✓ Added value and opportunity to up-sell



INSTALLER

Installing the system couldn't be easier. There are no additional wires, and no additional sensors to install either. It's no different than a normal lighting install. Pre-configurable from offsite, rapid to commission onsite

- ✓ No additional hardware, wiring or IT infrastructure required
- ✓ Simple retrofit replacement



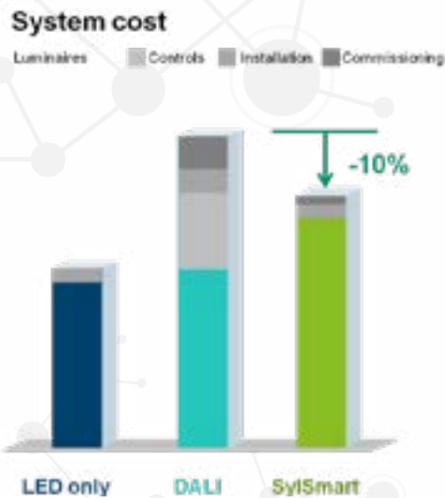
ENERGY MANAGER

The Energy Manager works with the energy efficiency of the facility, and even the organisation. Monitoring energy consumption, assessing business decisions for sustainability, and seeking out opportunities for increasing energy efficiency, are key.

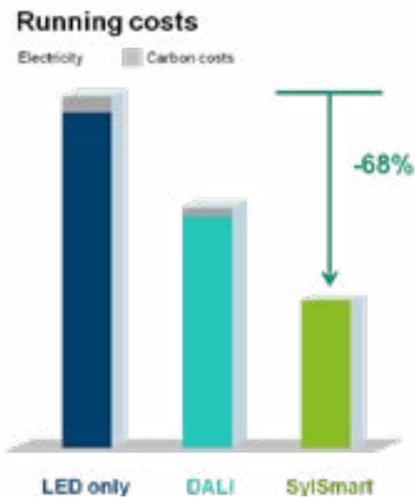
- ✓ Maximise savings whilst complying to latest regulations
- ✓ Can help efficient building certificates, meet sustainability targets
- ✓ Data driven analytics supporting year-on-year improvements

A SMART INVESTMENT

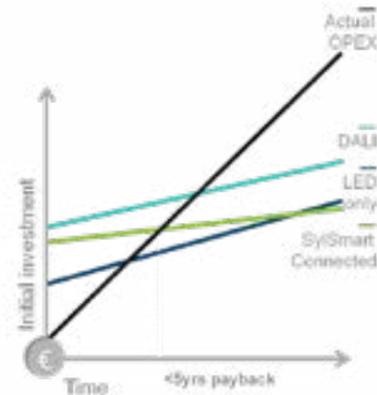
SylSmart Connected system is an investment well spent.



LED lighting has a low cost entry point, but they lack the control to ensure energy isn't wasted. DALI fixtures may seem less expensive, but the controls, additional wires, and commissioning soon add a significant cost on top. SylSmart Connected, with its exceptional control profiles, provides energy saving features are implemented right from the start.



Efficient light sources that are poorly operated or left on when not needed means excess energy consumption. SylSmart's advanced, de-centralised controls enables exceptional compounded energy savings of up to 68% more energy saved compared to having no controls at all.



SylSmart Connected is the smart choice for investment with a payback typically within 5 years making it 1.5 years faster than DALI and offering a new level of efficiency.

WARRANTY

At Sylvania, we pride ourselves on the quality of our products. SylSmart Connected products and system quality is backed by a 5 year warranty. Please follow the link to our website for more information <https://www.sylvania-lighting.com/en-int/warranty/warranties>



A complete solution

TAILORED SOLUTIONS WITH OUR HOLISTIC SUPPORT

Our 360 Services have been created to offer our expertise and support you through the complete project cycle and beyond. From an initial in-depth audit, we will tailor the complete design and deliver a turnkey solution for your lighting needs. Whether you require support in developing bespoke lighting and product design, managing the overall project, improving cost-efficiency, saving energy, decarbonisation, or creating a future-proof system, we can assist you.



SUCCESS STORIES

Productivity & comfort from smart lighting

- Smart sensors for user comfort and efficiency
- Low maintenance lighting infrastructure

"Thanks to Sylvania's smart lighting solutions, we were able to achieve a perfect blend of stylish, clean lighting integrated with smart technologies that have enabled us to showcase the innovative possibilities we all can benefit from in the future office"

PHILIPPE HOSTENS MARKETING MANAGER FOR BIS|ECONOCOM



Energy efficient & sustainable parking spaces

- Incremental 74% energy savings by controls
- Flexible light linked to occupancy & daylight harvesting

"The solution delivers on all main aspirations we had: it provides energy saving, was simple to install, intuitive to use and aesthetically pleasing." **WASSIM CHADLI**, FACILITY MANAGER AT WOLUWE SHOPPING CENTRE (MANAGED BY AG REAL ESTATE).



Smart & durable lighting refreshed industrial premise

- Occupant comfort & energy savings
- Maximised Complete project management from plan to install

"Optimised light is a clear benefit that can be seen throughout the property and the system facilitates easy maintenance."

ALAIN THIBIEROZ, MAINTENANCE MANAGER GMDP



SYLVANIA



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Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, specifications and performance data are constantly changing. Current details should therefore be checked with Feilo Sylvania International Group Kft.

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sylvania-lighting.com

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