

SYLVANIA

A hand in a dark jacket holds a glowing yellow shipping container by its top corners, which are attached to thin wires. The container is illuminated from within, casting a bright glow. The background is a dark blue sky with some blurred lights.

Effortless solutions for complex operations

Logistics and Industry

Light your world

Lighting challenges

Choosing the right lighting solution will positively impact some of the key challenges faced by facility managers today; from reducing maintenance costs, increasing energy efficiency and productivity as well as improving workers safety and overall working conditions. There is a clear argument for the need to switch to an improved lighting system:

- + Poor / varying levels of illumination, leading to potential impacts on product quality and employee wellbeing and retention.
- + Old technology can cost as much as 80% more to operate and offers very little control with limited capabilities with new technologies
- + Traditional lighting consumes 75% more energy than LED

Lighting energy demands

40%



in buildings overall

15%



in industrial premises

80%



in warehouses

Logistic and industry is always evolving! Are you?

Gone are the days of dusty dark shelves in poorly lit warehouses; today warehousing capabilities are an important economic and service benefit to businesses. Logistic platforms and warehouses are continually growing in size and importance due to the exponential growth of e-commerce and mail order selling.

The logistics and industry sector has evolved significantly over the last decade, reflecting the changing way in which goods are produced and distributed. Vast warehouses are becoming an established part of the industrial landscape, constantly evolving to keep pace with developments.

Lighting is essential to these unique working environments. With few windows, high ceilings and large floor surfaces Logistic and Industry buildings require specific lighting that adapts and conforms to their specific needs.

Logistic and Industry Lighting Best practices

All lighting solutions should consider;

Maintenance

- + Dust and moisture resistance (IP65+)
- + Corrosion resistance (including special versions for corrosive atmospheres)
- + Smooth external surfaces, to avoid build-up of dust and grease and allows for the fitting to be easily cleaned

Quality of Design

- + Efficient aesthetic design
- + Durable & robust construction suitable for harsh environments and intensive usage (24h/7)
- + Ease and speed of installation
- + Offers a range of mounting options
- + Comes with different body colours to help with visual management or simply match brand guidelines
- + Ability to fit in additional accessories such as protective grille/wire guard that will enhance the durability of the fitting
- + Range of optics suitable for different situations (open areas, aisles, high racks,...)
- + Modular design allows for upgradeability and easy disassembly

Quality of Light

- + Maximised Energy Efficiency (best lm/W)
- + Good light levels and uniformity
- + Colour stability of light over batch and over life
- + Limited surface temperatures especially for dusty environments

Glare & Flicker

- + Minimised glare – many other LED high-bay and low-bay products do not achieve good glare control or limitation
- + Low optical flicker and stroboscopic effects essential wherever moving and/or rotating machinery is in use



Compliance and Certifications

- + Observes full compliance with Standards and Directives
- + Independent third-party certification where relevant and applicable

Technical aspects to consider

- + Includes pre-cabling options for in-line plugs and sockets. Dimming options such as DALI or 1-10V
- + Integrated communications systems to allow for wireless or power-line carrier, controls and sensors
- + Low inrush current and maximised number of fittings per circuit breaker
- + Availability of high temperature versions for hot countries or for high temperature industrial halls and other specific harsh environments
- + Complementary self-contained emergency lighting solution



'Lights Out' Objectives

Trends in automation and data management often talk about the ideal 'Lights Out' factory – one that is autonomous, intelligent and requires minimal human intervention. An ideal scenario requires common business objectives and considerations to achieve them, such as ...



Ensuring compliance

Emergency lighting is a critical component in the modern factory /warehouse but often overlooked. Smarter facilities find ways to reduce or remove the burden of testing emergency lighting, through automatic, centralised self-testing. Critically, these systems rely on the installation of LEDs, which can help to achieve compliance in meeting increasingly stringent emissions targets and improving overall energy efficiency.



Enhancing Wellbeing

A well-lit factory impacts on the wellbeing of employees. In logistics, where shift work is prevalent, creating a more 'naturally' lit environment is particularly important. The optimum lighting system will carefully balance the need for high bay illumination with the comfort of operators.



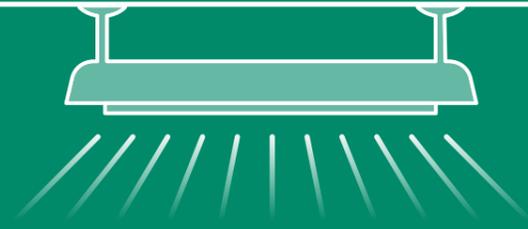
Optimising Pick Rates

Suitable lighting in the workplace directly influences productivity. This is of paramount importance in a very complex environment such as warehouses and logistic platforms where a variety of people, machinery, racking and vehicles in constant motion coexists. Improved lighting levels can increase productivity by 10% and reduce errors in manufacturing by 30%.



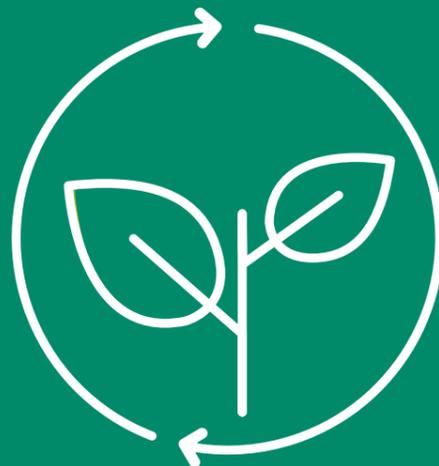
Reducing Maintenance time

Maintenance is key, but can be difficult for the high bay lighting native to warehouses, factories and distribution centres. Managing maintenance remotely through LEDs and centralised control systems reduces the need for zonal shut down and reduces downtime. Smart lighting systems can help Facilities Managers to optimise their maintenance schedules, by using occupancy detection to control usage and extend life-cycles.



Saving Energy

As energy costs increase, there are huge opportunities to reduce energy usage by taking a more efficient approach to lighting and extending lighting life-cycles. The first step is to understand how and where it is used and where inefficiencies exist by undertaking an Energy Audit of your facility to determine output and possible wastage. Once LED systems are in place, smarter use should be made of their capabilities.



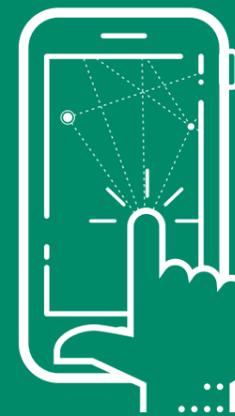
Saving Money

A switch-over to LED, an evolution to Smarter technologies, or a combination of both, can reap considerable financial rewards for factories, warehouses and distribution centres. So can more innovative approaches to financing. Sylvania can assist with intelligent, efficient lighting solutions, and help you to afford upgrades with new financing models.



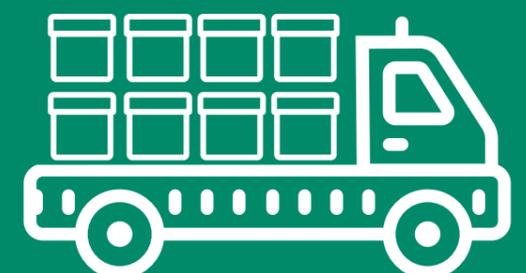
Taking Control

Smart controls such as Sylvania's SylSmart use the very latest technology to continuously detect human presence and natural light levels, adjusting the levels of artificial lighting to match the needs of each facility in real time. Busy areas will stay bright and well lit, whereas quieter areas will automatically dim gradually to save energy. Ease of installation of LED combined with solutions that lower maintenance and replacement, plus Smart solutions that offer control, connectivity, digitisation and monitoring.



Safety and Efficiency

Congested and dangerous areas of a warehouse or distribution centre require effective lighting installations. With the risk of accidents and damage to stock, good night and day visibility is critical for on-site safety. With the right lighting scheme in place, traffic flows can be better managed, loading cycles improved and wait times for drivers lowered.



Sylvania's Solutions

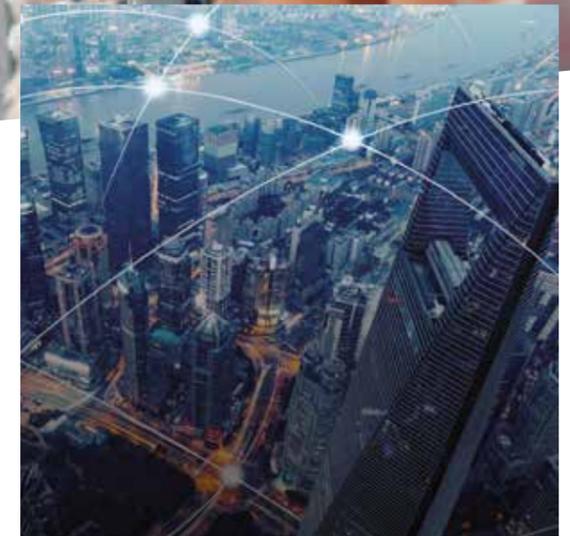
Logistics and industry is a demanding sector with strict requirements. Many of the buildings are running 24/7 and need an intelligent lighting solution that's energy and cost-efficient, low maintenance and sustainable. Sylvania offer smarter solutions to help deliver this to any project.



LED

Our solutions bring light to life.

Not only do Sylvania design, manufacture and install lighting solutions, we push the boundaries of technology and strive to innovate in everything we do. Our LED luminaires and lamps transform interiors and light the way for businesses. With a heritage that stretches back decades, we've put our knowledge and expertise to use across hundreds of challenging lighting projects, from multi-site businesses to stunning urban landscapes.



SylSmart

Smarter lighting. Smart Choice.

Take a moment to look around your workplace during the day. How many high intensity lights are switched on while nobody is around? How much light gets wasted in those corridors and rooms that have extremely low footfall?

SylSmart uses the very latest technology to detect human presence and natural light levels, adjusting the levels of artificial light to match the needs perfectly. Busy areas like foyers and corridors will stay bright and well lit, where as quieter areas like meeting rooms and lesser used corners of the your building will automatically dim gradually over time to save energy.

SmartServices

A complete solution provider

Smart Services are designed to provide you with a total solution service. From Audit and Design, through to Project Management, Installation and Commissioning Sylvania's Smart Services work for you.

Our Smart Services "toolkit" can facilitate projects of any size and complexity to make your life easier and your projects run smoothly.



SylBay Gen 2



Where form and function meet

A luminaire that perfectly balances form and functionality. The range benefits from a robust design and precision optics.



Unscheduled maintenance, wasted productivity, avoidable downtime. Why keep it hanging over your head? Turn the concerns hanging over your head into your opportunity for improvements. SylBay Generation 2 is the answer. This innovative lighting product solution is optimized for high racking logistic platforms and manufacturing environment.

Highlights/USPs

- + Unique modular high-bay – 2, 3, 4 or 6 LED module array
- + 5 levels of lumen output up to 34,000lm
- + Range of control options to maximise energy saving to match your budget
- + Typical estimated lumen maintenance up to 100,000hrs at 85%
- + An operating temperature range of -40°C to +50°C (non PIR version) makes SylBay G2 the perfect fit for both cold storage applications and high temperature environments as well

Technical Specs

- + Fixture power (W): 48 – 222
- + Luminous flux (lm): 7000 to 34000
- + Efficacy (lm/W): up-to 163 lm/W (L6HE DALI)
- + Beam angle: 90°, 60°, Highrack (10x20°)
- + Control technology: PIR, DALI and SylSmart Connected Industry
- + UGR: UGR22 or less
- + E3 Emergency accessory
- + SDCM 3

Energy efficient and long lasting

START Highbay



START Highbay offers an extensive range of high efficiency LED industrial fixtures developed for factory floor production areas, storage warehouses, airports, supermarkets, DIY superstores and large commercial areas. With a nominal average lifetime of 50,000 hours, a 5 year warranty and energy efficient LED technology - START Highbay can reduce your operational costs and lower your energy consumption.



START Highbay HE



START Highbay HE comes as a high efficient extension to the well known START Highbay range. START Highbay HE has been developed to be energy efficient and long lasting. The range provides a fresh light quality to aid productivity with a nominal average lifetime of 50,000 hours and a 5 year warranty. Providing you with peace of mind, as less maintenance is required whilst downtime and disruption are significantly reduced.



Highbay Features

- + High performance: delivers 26,000lm (luminaire lumen output on 200W version), with up to 130lm/W (total system efficiency)
- + Compatible with PIR sensor (Code: 2657747) which can control up to 10 luminaires on the 1-10V output
- + 3 different lumen packages (13klm, 19.5klm, 26klm) and 2 different beam angles (60° and 90°)
- + Available in 1-10V and DALI version
- + Also available with Sylsmart Connected Industry
- + Low glare value, <25 (90°), <22 (60°) – recommended for industrial application
- + Photobiological risk group: RG1
- + Operating temperature from – 30 to +50°C
- + Available in neutral white (4,000K) and cool white (6,500K) colours
- + Additional accessories: shade, mounting brackets for usage in different applications

Highbay HE Features

- + A high efficient range of the industrial highbay available with 2 different lumen packages (30klm and 35klm) and 2 different beam angles (60° and 80°) for different application areas.
- + Bringing energy saving with replacing HID 400W+ fixtures and in any new installation.
- + Available in 1-10V
- + Extraordinary performance: delivers up to 35,000lm (luminaire lumen output on 228 W version), with up to 155 Lm/W (total system efficiency) and a lumen maintenance of 54,000hrs L90B50
- + Low glare value <25 WB and <22 MB - recommended for industrial application
- + Available in neutral white (4,000K) and warm white (6,500K)
- + Photobiological risk group: RG1

Robust / Sensitive

2



Sylproof Superia



Sylproof Superia is ideal for use in dusty or moisture-rich environments, where high protection and flexibility are essential.

Greater efficiency, better color consistency are just some of the many benefits Sylvania's Sylproof Superia provides without compromising superior light quality. Suitable for both retrofit and new build applications, Sylproof Superia luminaires are extremely low maintenance with a nominal average lifetime of 50,000 hours.



Highlights / USPs

- + Highly efficient up to 155lm/W with a lumen maintenance of 60,000hrs (L80B10)
- + SylSmart options for carpark solutions
- + Heat and impact resistant polycarbonate body (IK08)
- + Smooth body finish optimised for LEDs
- + Slimmer diffuser optimised for LED
- + UV stabilised polycarbonate body and diffuser ensures no discolouration will occur over time
- + Clear prismatic PC diffuser for improved uniformity
- + Stainless steel fixing brackets for ceiling mounting
- + Through wiring kit available on request
- + Suitable for suspension mounting
- + 5 year warranty as standard
- + SDCM 3
- + MW function with dimming option
- + DALI EM version

Resilient / Smart

Hydroproof



Vibration. Water. Dust. Chemicals.

Hydroproof's body is built from extremely durable glass-reinforced polyester, constructed to withstand abrasive chemical exposure for optimal performance in a highly corrosive environment.

Suitable for complex environments with challenging demands, its clear PMMA diffuser (IK04) enhances uniformity and emits a softened, controlled light with minimal glare. Hydroproof is extremely low maintenance with a nominal average lifetime of 50,000 hours.

Future proofing with SylSmart

SylSmart elevates industrial lighting to a higher calibre. Crafted with an emphasis on open standards, it evolves with your needs, ensuring your future access and remote upgrades to the latest technology through investment in smart lighting today.



Features

- + LED integrated waterproof fixture in 660mm, 1,200mm and 1,500mm nominal length (single or twin housing).
- + High efficiency throughout the range with up to 155lm/W system efficiency and a lumen maintenance of 60,000hrs (L80B10)
- + Available with assembled quick connectors (Stucchi)
- + DALI versions are DC compatible as standard
- + Available with 3 hour maintained emergency batteries
- + For further cost savings, available with DALI drivers and microwave presence sensor
- + SylSmart options for carpark solutions available
- + Body made from extremely resistant glass-reinforced polyester
- + Protection against chemicals
- + Smooth body finish optimized for LEDs with extra flat diffuser, easy to handle
- + Specially designed clear PMMA diffuser (IK04) for improved uniformity – softens and controls the light whilst optimising output
- + Stainless steel fixing brackets for ceiling mounting
- + 5 year warranty
- + Through wiring kit available on request
- + Suspension compatible



Rugged / Bright

START Waterproof



Looking for a cost effective hero to fight the elements? Constructed from polycarbonate body and diffuser, Start Waterproof LED offers great energy savings. The luminaire benefits from a water and dust resistant polycarbonate body and diffuser offering IP65 protection and an impact rating of IK08. The linear prismatic diffuser structure optimises light output, simultaneously reducing damaging glare.



Highlights / USPs

- + Highly efficient up to 125lm/W with a nominal average lifetime of 50,000 hours
- + Available in neutral white (4,000K) and cool white (6,500K)
- + Heat and impact resistant polycarbonate body (IK08)
- + UV stabilised polycarbonate body and diffuser ensures no discolouration will occur over time

Technical specs

- + Fixture power (W): 12–67
- + Luminous flux (lm): 1,400 – 8,300
- + Efficacy (lm/W): up to 125
- + Beam angle: 100°
- + Control technology: Switched or DALI
- + SylSmart options for carpark solutions

Industrial LED Floodlight

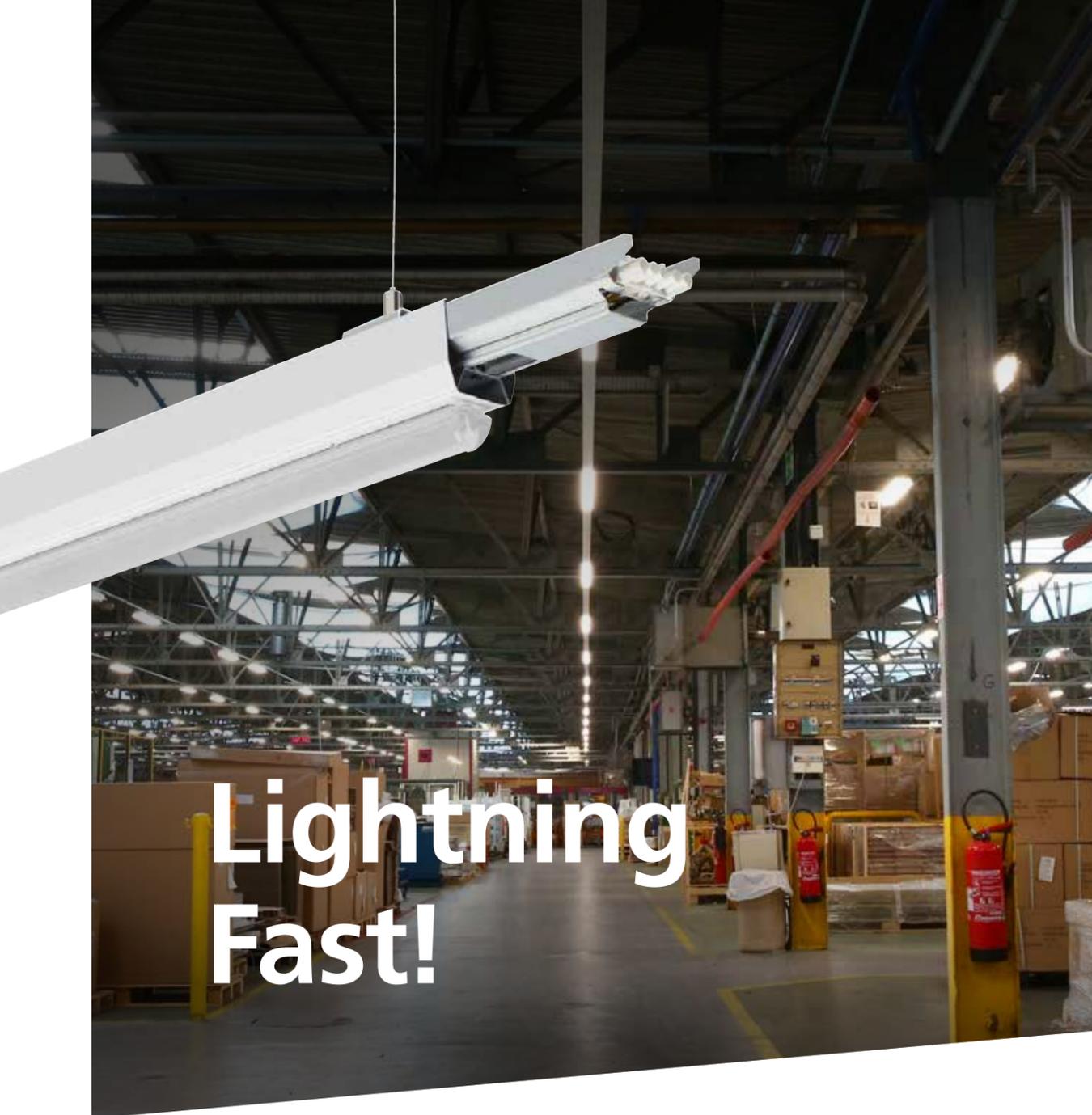
START Flood IP66

Highly efficient, durable die-cast aluminium body makes START Flood a perfect choice for building facade, parking lot or area lighting applications providing 1:1 replacement of conventional technologies. The family comes in 5 different sizes, available in Symmetric and Asymmetric beam angles and offering wide range of accessories.

Highlights / USPs

- + Includes a 1m pre-wired stripped cable and fitting bracket for quick and easy installation
- + Low maintenance cost due to the long lifetime thanks to the efficient LED technology
- + Universal mounting bracket allows wall or surface mounting with the possibility of vertical tilting
- + A wide range of lumen packages to cover many different applications
- + Neutral white (4000 K) colour temperature
- + Symmetrical or Asymmetrical light distribution





Lightning Fast!

FTS – LED

A high performance LED lighting system for creating continuous lines of light. Specifically designed for open space environments such as supermarkets, superstores, warehouses or assembly halls. FTS is highly efficient and a typical system can consist of joining modules together to create the perfect lighting scheme.

Highlights / Technical features

- + Five types of light distribution beam available: Wide / Narrow / Double Asymmetrical / Asymmetrical (right) / Asymmetrical (left)
- + Lighting source: built-in LED module
- + Luminous efficacy: up to 152 lm/W
- + Lumen Output: 9000 lm & 18000 lm
- + Color Temperature: 4000K Neutral White
- + CRI: >80
- + Lifetime: 50,000 h L80B50
- + Chromaticity: <3 SDCM
- + Mounting: Suspended, In-line
- + Housing: Supporting rails and gear trays made of profiled steel sheet, white pre-lacquered
- + Ta (min/max): -20°C / +35°C
- + Two sizes available: 1720 mm (9000 lm) / 3440 mm (18,000 lm)



A guiding light



Sylsafe Bay

A high performance IP65 rated surface mount luminaire is suitable for high-bay, mid-bay, open area and escape route applications. SylSafe Bay is a self-contained LED emergency luminaire offering peace of mind. Its durable IP65 housing creates a sense of security and performance in challenging environments.

Highlights / USPs

- + Emergency lighting luminaires for high ceiling industrial applications
- + IP65 Rated
- + Surface mounted version
- + 5 different light distributions for height flexibility
- + Self contained versions come with 3 hours duration as standard. One hour versions available upon request
- + Central battery versions also available
- + Autotest DALI versions carry out regular tests automatically and use the indicator light to display results.
- + Complete system control and monitoring is also available with DALI versions connected to the separately available N-Light system



Intelligent and flexible light

SylSmart
Connected Industry

SylSmart Connected Industry is a highly intelligent lighting control. Providing an easy to install and commission experience, the solution is robust, secure, flexible, scalable whilst delivers high efficiency with low maintenance throughout.

Connected Industry has been designed to meet the challenges of industrial environments by using robust and secure wireless frequencies combined with tough and highly capable industrial grade sensors and luminaires. Intelligent controls deliver maximum energy savings. Each luminaire is enabled with occupancy and daylight sensing. With advanced monitoring capabilities, Connected industry can also help reduce operational costs. Industrial applications have many

different areas of use, so a solution that is flexible to meet these different needs is key. As business requirements change, facility layout requirements also need to adapt and SylSmart controls can be re-commissioned and adapt to changes with minimal disruption. No matter the size of your site, Connected industry is scalable to meet your needs, allowing you to start with a single site and expand across your entire estate.

“Smarter lighting controls combined with energy monitoring and central control can deliver up to 90% energy saving”

90%

energy saving

Edward Lees, Global Senior Product Line Manager – Smart Lighting and Controls

Key Features



No additional control cables: Each luminaire is wireless making installation quick and easy.



Maximise energy saving: Each luminaire offers high grain control delivering up to 90% energy reduction.



Local control: With wireless grouping and scheduling choose your precise lighting controls needs to meet your application.



Centralised Monitoring: Connected Industry helps you control your costs through optimisation of lighting controls and planning maintenance more effectively.



Building system integration: Can be linked to Building management systems to become smarter and more efficient.



Tough luminaires, tough controls: All luminaires and their controls are IP65 rated to ensure they can withstand the elements.



Built for you: Connected Industry is a system you control without the need to call in expensive engineers.



Providing smart tools for your business

SmartServices

Without regular maintenance light levels can fall by up to **30%** in 2-3 years, leading to more lights being turned on to compensate.

Smart Services are available for all projects, however large or small, and can be used in any combination.
To access Smart Services simply speak with your local Sylvania representative or visit: sylvania-lighting.com/smart-services for more information.



SmartServices can assist you in delivering your projects to achieve energy efficiency, carbon savings, compliance, piece of mind or simply discovering what is actually in your estate.

Audit
This can be as simple as creating an asset register, to as critical as ensuring Emergency Lighting compliance. A Sylvania Audit can also discover the opportunities for your business to make efficiency gains and savings.

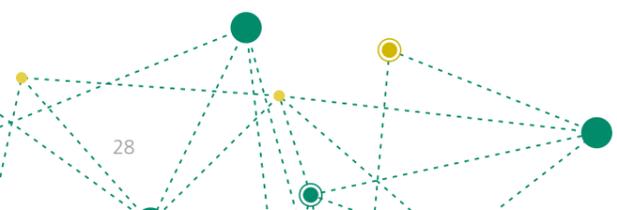
Design
What's best for your project? Where do the fixtures need to go? Is my Emergency Lighting in the right place? Use a Sylvania Design service to provide you a professional lighting design and all the associated outputs.

Turnkey
As a 'one stop shop' Sylvania will Project Manage your project, install the new lighting equipment, remove and recycle the old equipment and ensure your new equipment is set up, optimised and customised to suit your operation.

Commissioning
You've got your new lighting infrastructure - ensure that it is set up in the most efficient manner, ensure it is compliant or just have some changes made post a space reorganisation - use the Sylvania Commissioning option.

Maintenance
Keep your infrastructure in tip top condition; ensure continued compliance and efficient operation.

Storage
Let Sylvania manage your logistics and receive just in time deliveries for your project. Cut lead times, by having access to consignment stock.





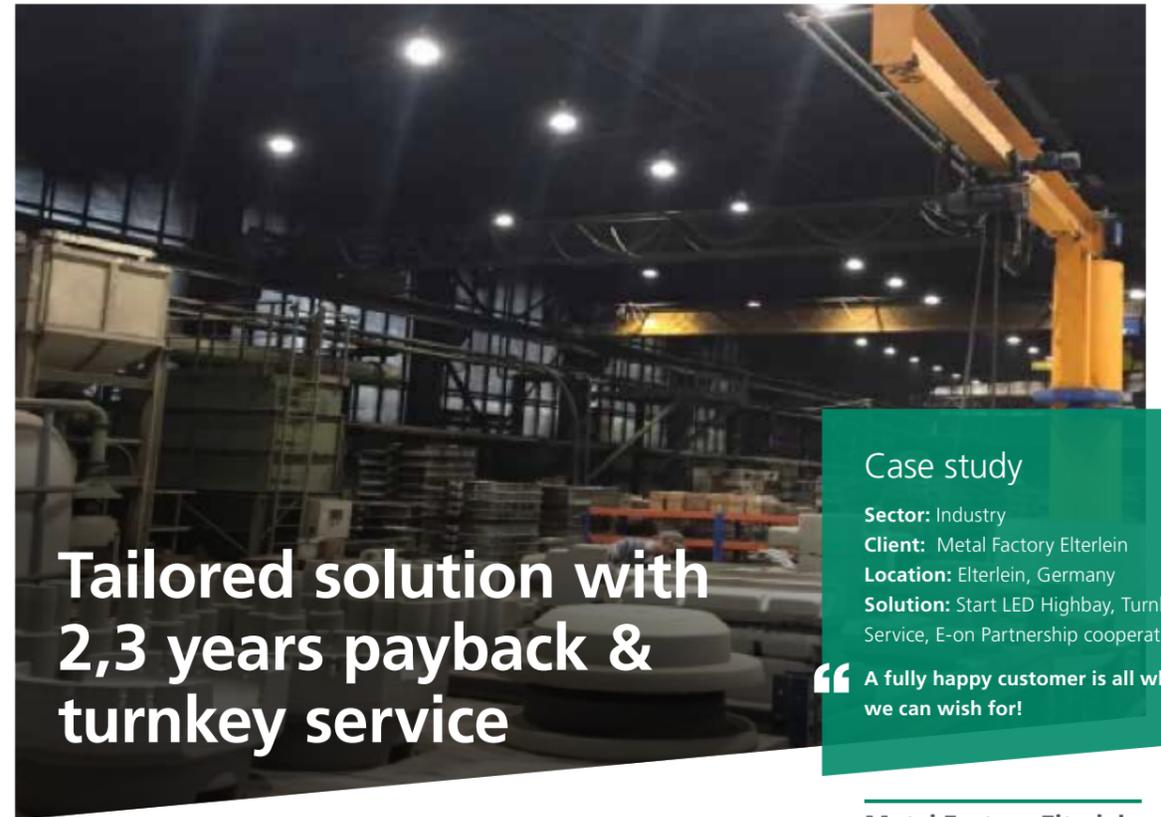
3 factories with new lighting, 3 years payback with Pay-as-You-Save Financing

Case study

Sector: Industry
Client: Unitex – Sedatex
Location: Barcelona, Spain
Solution: LOGIC Smart Finance
Products used: Start Waterproof, Start Flood IP66

“ The first to notice the LED replacement was the employees, who congratulate us. It was a quick improvement, in 48 hours we solved everything by email.

Sedatex – Unitex



Tailored solution with 2,3 years payback & turnkey service

Case study

Sector: Industry
Client: Metal Factory Elterlein
Location: Elterlein, Germany
Solution: Start LED Highbay, Turnkey Service, E-on Partnership cooperation

“ A fully happy customer is all what we can wish for!

Metal Factory Elterlein



Adaptive & customized smart lighting system delivered further 54% energy saving

Case study

Sector: Logistics
Client: Transgourmet
Location: Cestas, France
Solution: Smart Lighting SylSmart Connected industry, Turnkey Installation Service, Start Waterproof MW, Panels & Downlights

Transgourmet



Brand new manufacturing factory

Case study

Sector: Contractor AM ELECTRICAL SERVICES (NI)
Client: AJ POWER
Location: Craigavon, Northern Ireland
Products used: Start HighBay. There were 110 units of Start HighBay 19,000lm used on this project.

AJ Power

SYLVANIA



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 Europe Limited.

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