

**Helvar**

**100** YEARS

European indoor lighting  
standards

Helvar intelligent lighting  
controls solutions

**Tbilisi 26.04.2023**

Presented by  
Przemyslaw Skorupa  
Regional Director of Eastern Europe



[helvar.com/helvar-insights](https://helvar.com/helvar-insights)

An aerial night view of a city, likely Dubai, with numerous skyscrapers and buildings. The scene is illuminated by a mix of warm city lights and vibrant, colorful light trails in shades of purple, blue, and green that crisscross the urban landscape. The sky is a deep blue with some clouds near the horizon.

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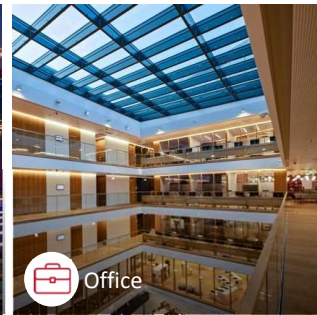
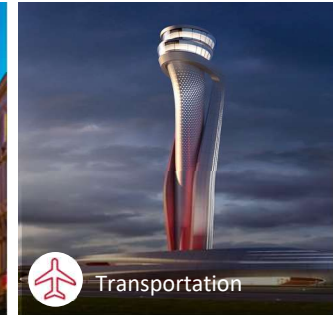
100 YEARS



# Helvar 100 YEARS

Turning Everyday Places into Brighter Spaces

Sustainability, Wellbeing and Insights for Smart Buildings



**250+**  
EMPLOYEES  
AT HELVAR

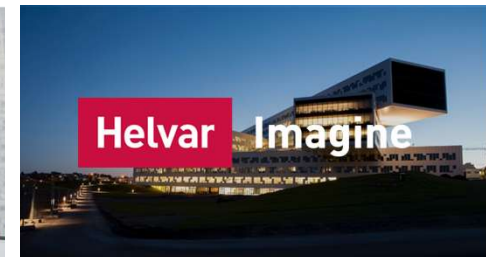
**80+**  
PARTNERS  
WORLDWIDE

**275,000+**  
PROJECTS  
WORLDWIDE

**20m+**  
DALI POINTS  
WORLDWIDE

**75+**  
COUNTRIES  
USING HELVAR

**135+**  
PATENTS  
REGISTERED



# Certified Experts

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- ▶ leaders in the field of future-proof spaces



**SmartScore**  
CERTIFIED





# Global Alliances

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# Renowned Global Projects

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# Award-winning Solutions

*We're proud to have market leading solutions and projects.*

## **DALI awards to Helvar :**

*2022 Winner - Commercial & Professional - Royal College of Physicians HQ, UK*

*2022 Highly Commended – Healthcare- Hospital Nova, Finland*

*2022 Highly Commended – Industrial – Oyak Renault Factory, Turkey*

*2021 Best Outdoor Project - Column of Immaculate Conception, Italy*

*2021 Special Recognition - Best Large Project - The Presidential Palace, Turkey*

Frost & Sullivan Product of the Year 2020 – ActiveAhead Generation 2

LUX Product of the Year 2020 – ActiveAhead Generation 2

BETA Awards - Product of the Year 2020 – ActiveAhead Generation 2

Turning Everyday Places into Brighter Spaces

COMMERCIAL & PROFESSIONAL



HEALTHCARE



INDUSTRIAL



FROST & SULLIVAN  
BEST PRACTICES  
AWARDS

Helvar

RECIPIENT OF THE  
2020 EUROPEAN ARTIFICIAL  
INTELLIGENCE-POWERED LIGHTING CONTROLS  
COMPANY OF THE YEAR AWARD

Helvar



Helvar

CONTROLS PRODUCT  
OF THE YEAR  
**ACTIVEAHEAD  
GENERATION 2**





# Our Purpose

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## Sustainability

Right now, it's crucial to reduce our energy usage with smart and future-proof solutions. That's where we step in.



## Wellbeing

We are human-centric lighting experts – the lighting in spaces where we work, learn, and relax needs to be fine-tuned to our needs.



## Intelligence

The rise of smart buildings is here, meaning data insights and intelligent systems are more important than ever before.



BUILDINGS  
OF THE  
FUTURE  
ARE ABOUT **YOU**





WHY

IS THE DESIGN  
OF FUTURE  
BUILDINGS  
IMPORTANT



DO I REALLY SPEND

90%

OF MY LIFE  
**INDOORS?**





STANDARDS

ARE DRIVING  
CHANGE



EN 12464-1





STANDARDS

ARE DRIVING  
CHANGE



IEC 62386



## Digital Addressable Lighting Interface

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- **DALI**® is the industry-standard protocol (*language*) for bi-directional, digital communication between lighting-control devices.
- Technically managed in the open, global standard **IEC 62386**
- **DALI-2**™ is the latest version of the DALI protocol
- DALI-2 certification is driven by the **DALI Alliance**



# The global industry alliance for DALI



- The **DALI Alliance** is an open, global consortium of lighting companies that aims to grow the market for lighting-control solutions based on DALI.
- Over **300** members worldwide

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## DALI & DALI-2

Helvar

### The strengths of DALI ...

- DALI is a dedicated, standardized protocol for digital lighting control.
- DALI lighting systems are robust, scalable, cost-effective, reliable and flexible.



### ... are extended and enhanced in DALI-2



- Standardised DALI Controls (Devices)
- Improved Quality via Certification
- Focused on interoperability
- Added Features & Functionality



# KEY FEATURES OF DALI-2

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Focuses on multi-vendor interoperability,  
backed by DALI-2 certification.

Introduces more detailed and  
comprehensive testing  
requirements.



Extends to all devices in a lighting  
control system, including input  
devices (e.g. sensors) and  
application controllers.

DALI-2 Certification is driven  
and supported by the  
DALI Alliance

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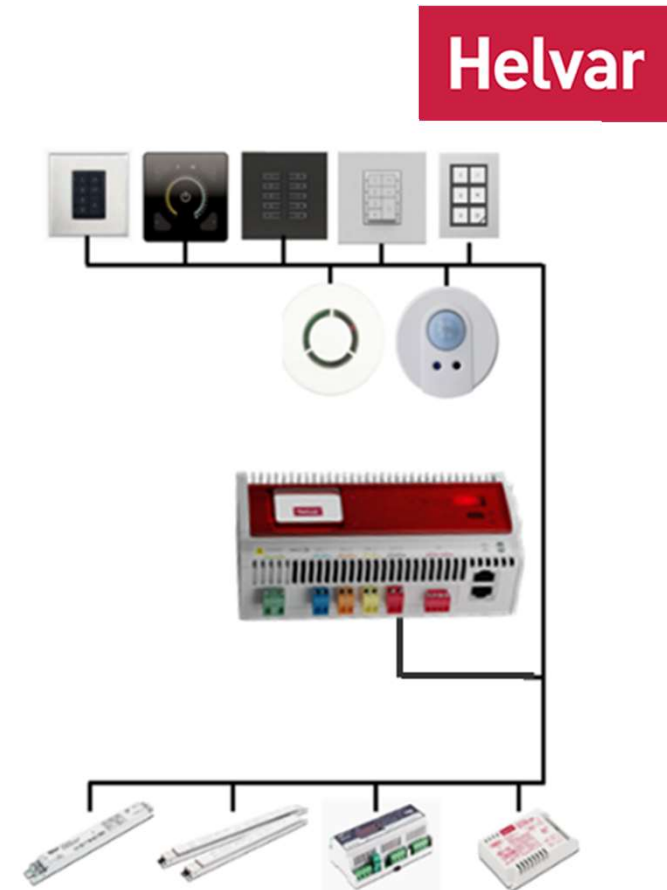
*Key Technical Features*





# DALI-2 Protocol: Key Features

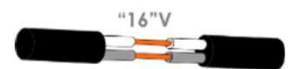
- DALI enables:
  - Control, configuration & querying of DALI devices
    - **DALI power and data on same pair of wires**
- Individual, group & broadcast addressing to **any** DALI device
- Recall of **pre-programmed** scenes
- Each DALI subnet has a maximum of **128 addresses (64+64)**
  - **64 control gear** (e.g. LED drivers)
  - **64 control devices** (e.g. sensors)



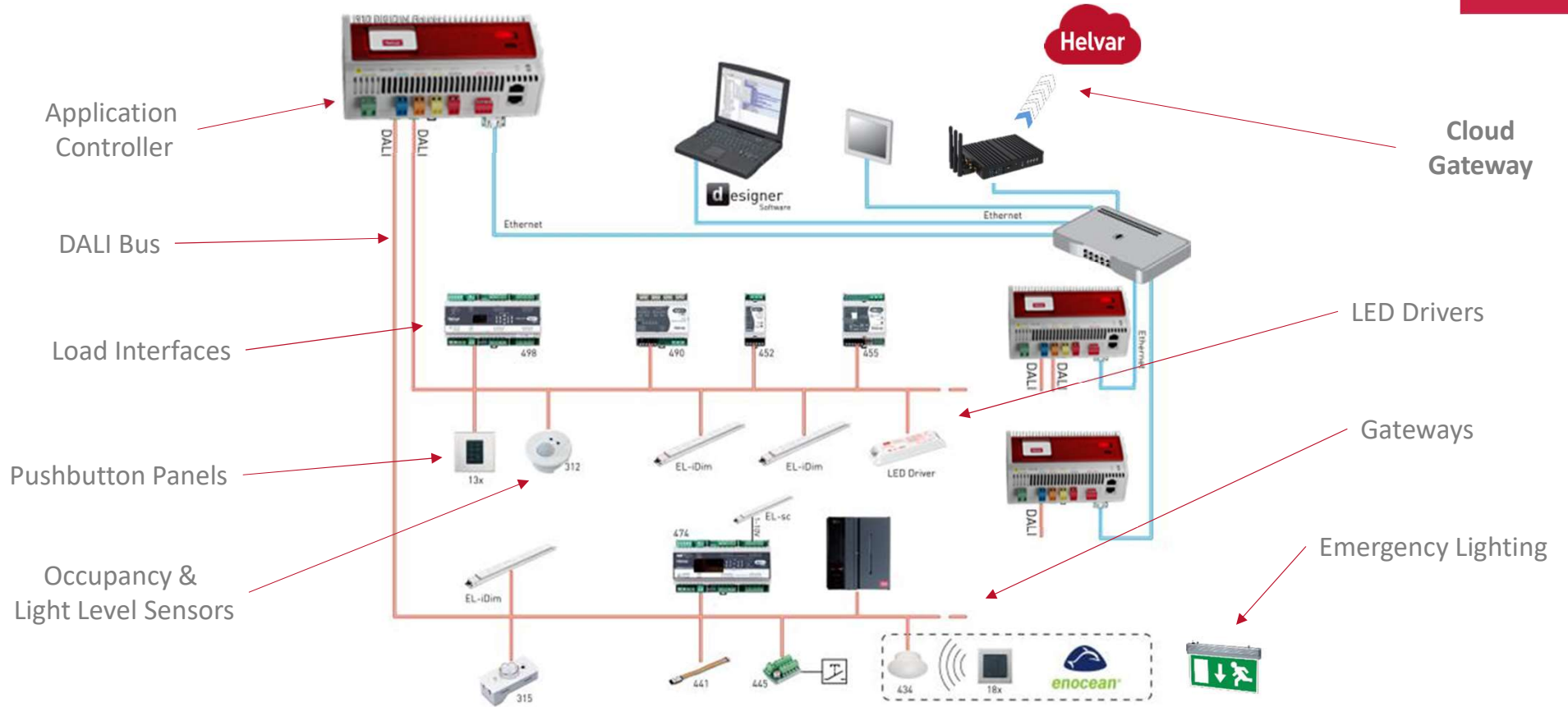
# DALI Systems: Wiring and Bus Power

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- DALI uses a **2-wire bus** for communication (commands/data)
  - **Power and data on the same pair of wires**
- DALI bus must be powered to allow communication
  - **250 mA max.** bus power supply
  -
- **Standard 2-core cable** (1.5 mm<sup>2</sup>) can be used
- **Maximum 300m** cabling recommended (between furthest-apart devices)
- **Polarity-free & free wiring topology** is allowed
  - Bus wiring can use daisy-chain or star connections, or combinations
  - A closed loop should not be used



# DALI-2 Solution Overview



# Multi-Master Application Controller

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Examples: Type 6 (LED), Type 8 (Tunable White), Type 1 emergency



Part 301  
Push Buttons



Part 302  
Absolute Input



Part 303  
Occupancy  
Sensor



Part 304  
Light Sensor

## 950 Application Controller

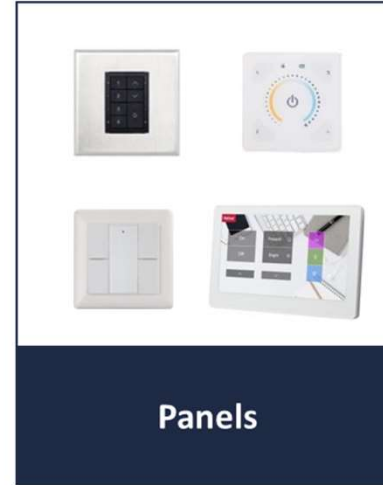
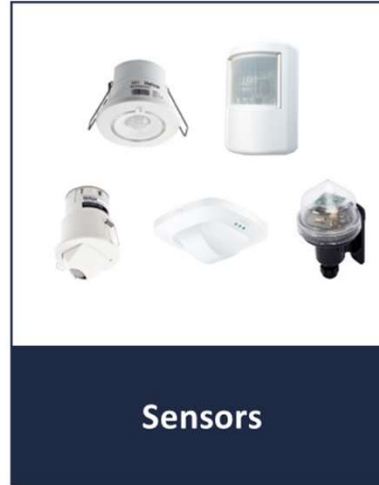
Key features (in-built)

- 4 x DALI-2 Multi-master networks
- LCD for DALI network testing and alerts
- DALI-2 controls
- Helvar DALI devices (DigiDim)
- Astronomical Timeclock and Scheduler
- Emergency Lighting
- Light over time
- Configuration stored in system



# Key Solution Products

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# DALI-2 Benefits and Features



Flexible & Scalable



Integration & Smart Building



Sustainability and Energy saving



Low Maintenance



Comfort & Safety



Wellbeing & HCL



Customizable programming  
Conditional logic  
DALI repeaters  
12800 lights and inputs  
65535 groups  
128 scenes

Floorplan visualisation  
Integration (APIs, BMS, AV)  
Apps for Web, phone and tablet  
Logic (conditions, schedules)  
Multi-site connectivity  
Occupancy analytics

Presence detection  
Absence detection  
Daylight harvesting  
Scheduling  
Energy reporting  
PIR timeout optimisation  
Load trimming  
Load shed

24/7 Monitoring  
Alerts and notifications  
Alerts with recommendations  
Maintenance reports

Corridor Hold  
Automated Emergency Test  
Emergency Test Reports  
Scenes  
Transition timeout  
Exit Delay

Tuneable white UIs  
Circadian Rhythm  
Colour Control

Standardised / Certified



Multi-vendor interoperability  
Application controllers  
64 lights + 64 inputs  
32 groups for inputs

Single network (lighting & controls)  
Occupancy Protocol  
Light level Protocol  
Energy data

Longer fade time  
Maintenance data  
Improved quality through certification

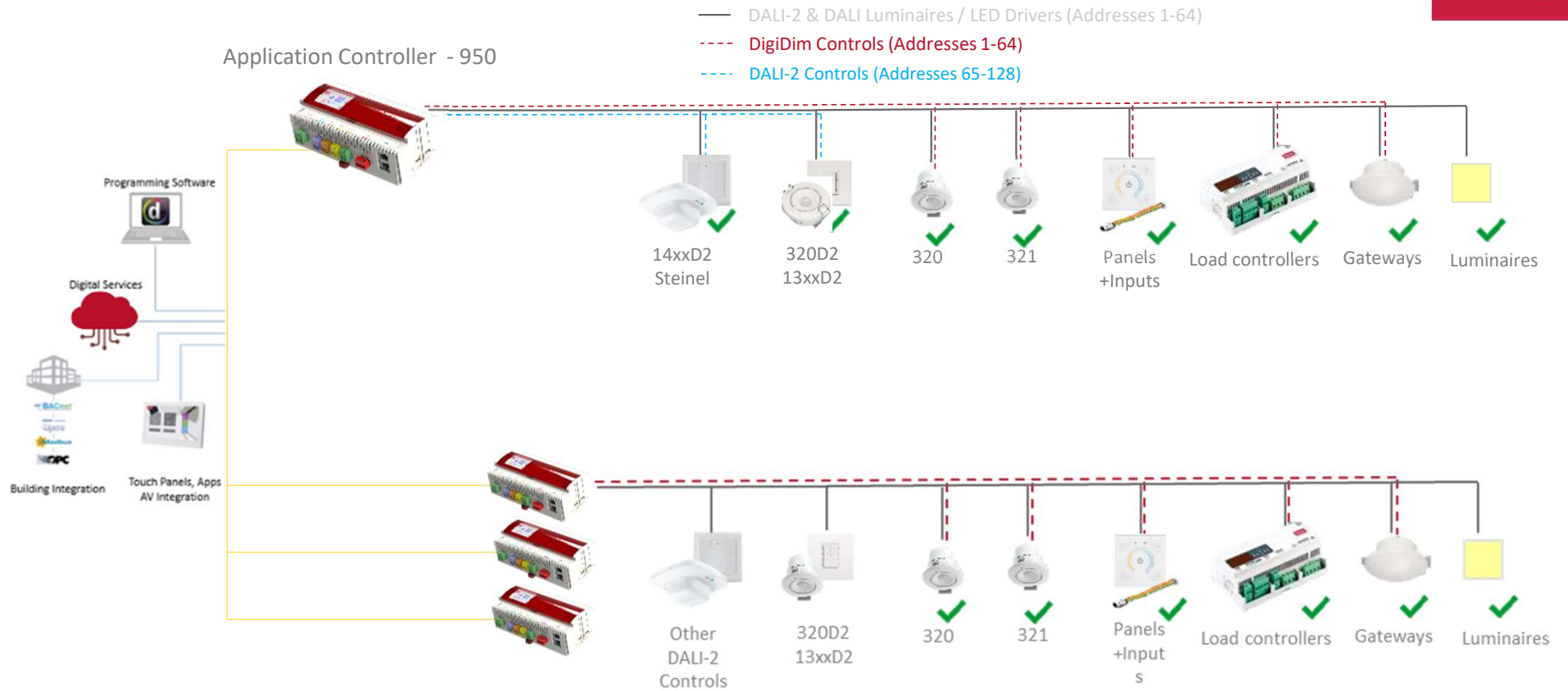


64 lights  
16 Groups  
16 Scenes

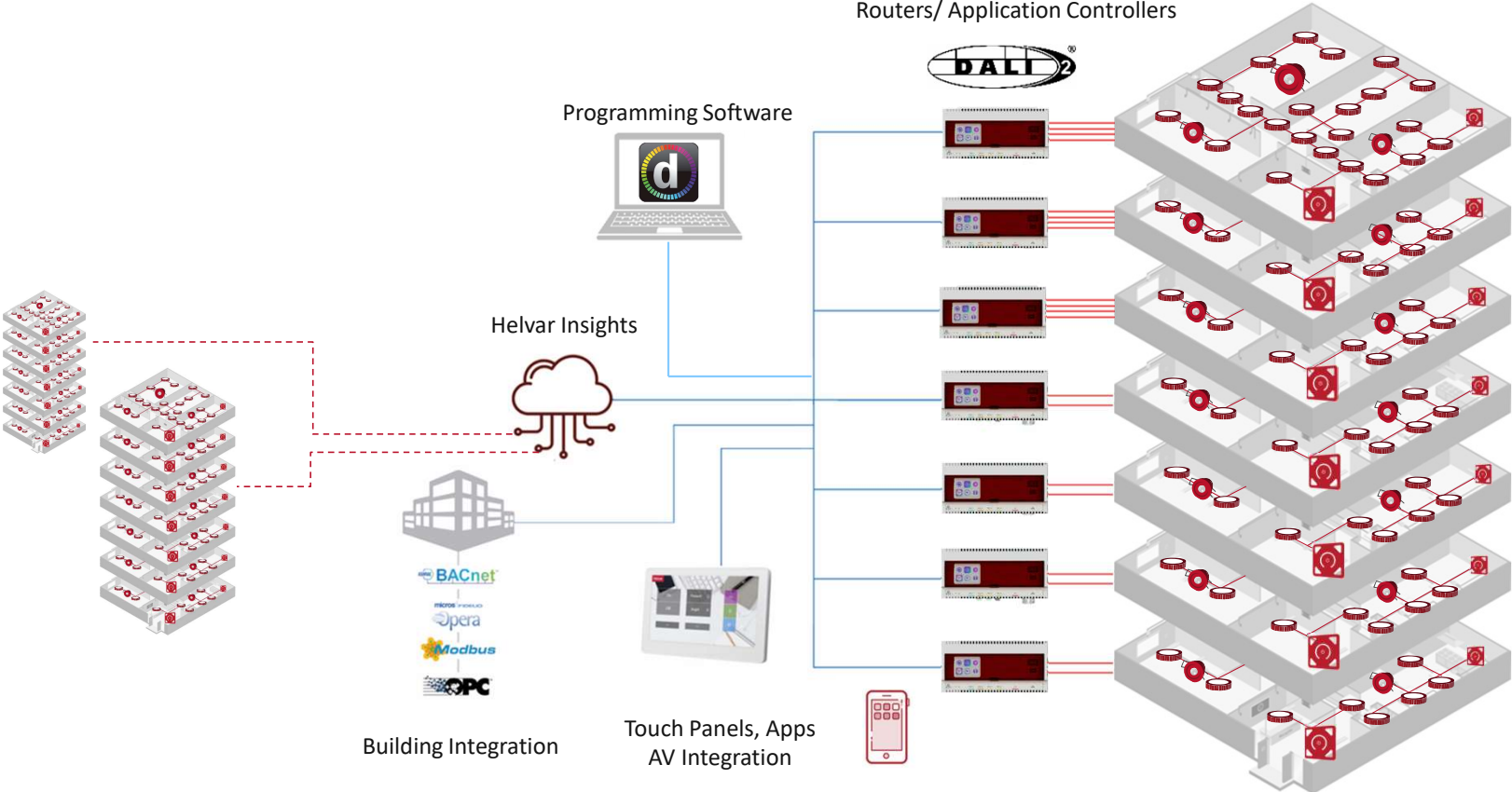
Topology & Polarity Free  
Device missing data  
Emergency test data  
Lamp fail data

Dimming Protocol  
Tuneable white & colour  
Emergency Test

# Solution Overview



# Whole Building Solution





# DALI – Emergency Lighting

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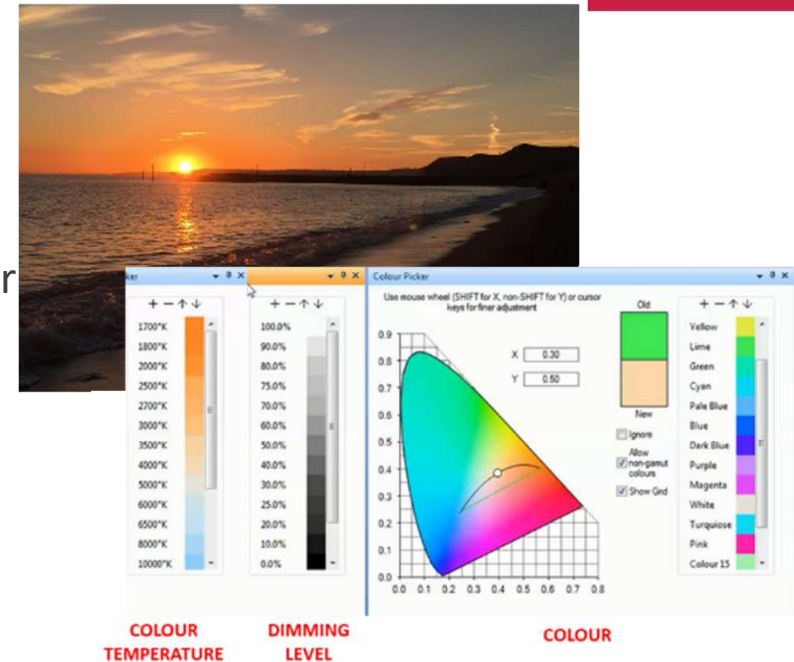
- **Automated self-testing:**
  - In many countries, there is a legal requirement for periodic testing of emergency lighting
- **DALI allows testing to be automated:**
  - Function test: quick test of the battery, charging circuit, driver/relay and lamp
  - Duration test: checks operation for the rated duration (for example: 1h, 3h...)
- **Feedback:**
  - Test results and information on failures
  - Other information: Battery charge level, lamp operating hours and more
- **DALI enables illumination and emergency lighting on the same network**



# DALI – Dynamic Lighting

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- **DALI-2 certification** now includes tunable white control
- **DALI Type 6 & DALI Type 8**
- Enables control of **intensity** and the **colour** output of two or more lamps from DALI control gear.
- Allows simple control of colour:
  - **RGBWAF** for individual control of each colour channel
  - **Tc (tunable white)** for colour temperature control
  - Precise and repeatable selection of colour:
    - **X-Y coordinate** (chromaticity)



- **Dynamic Lighting – Light Over Time**



# Utilise Dynamic Lighting

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## Relax

- Lower Intensity level
- Warm white



## Energise

- Highest intensity level
- Cool white



## General activities and tasks

- Right Intensity level
- Neutral white



## Productive

- High intensity level
- Cool White





STANDARDS

ARE DRIVING  
CHANGE

EN 12464-1




# THE EUROPEAN LIGHTING STANDARD

Helvar

## EN 12464-1

- ▶ Specifies lighting requirements for people in indoor workplaces
- ▶ Specifies requirements for lighting solutions for most indoor workplaces and their associated areas in terms of quantity and quality of illumination
- ▶ Replaces version from 2011
- ▶ For anyone designing indoor spaces



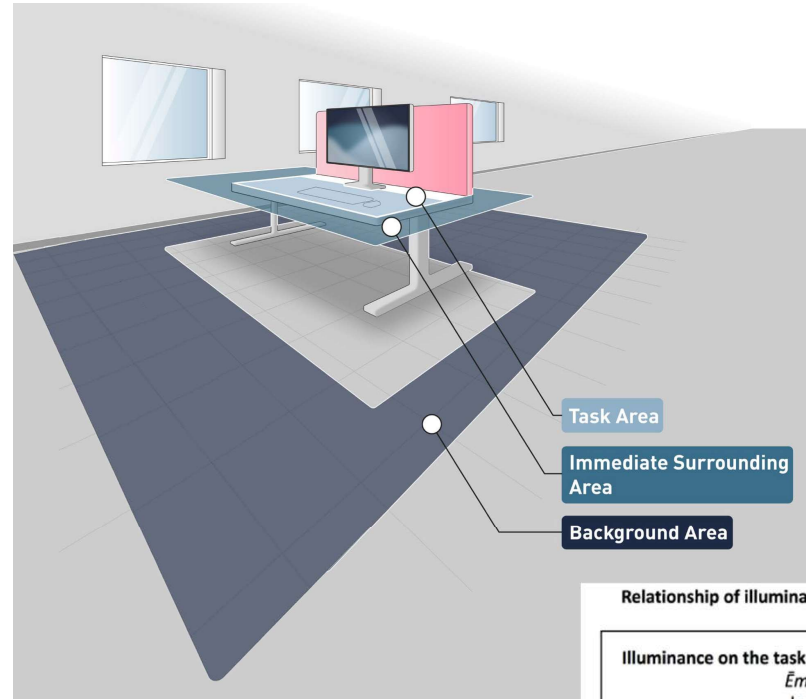
A modern office interior featuring a long, sleek, white Helvar lighting fixture mounted on the ceiling. The office has white walls, a glass partition, and a potted plant. A white desk with a red chair is visible in the foreground.

“ This standard recommends the use of the higher maintained illuminance  $\bar{E}_m'$  to give the user **the full use of the lit environment.**

Designing a basic lighting installation only fulfilling the *minimum criteria* **limits** the *possible benefits* of good lighting quality. ”

# EXPLAINING THE CONTEXT

- ▶ Task area
  - ▶ This is in the tables
  
- ▶ Immediate surrounding area
  - ▶ Min 0,5m – within the visual field
  - ▶ Maintained illuminance depends on task area illuminance
  
- ▶ Background area
  - ▶ min 3m – floor level
  - ▶ Illuminance 1/3 of immediate surrounding area illuminance



Relationship of illuminances on immediate surrounding to the illuminance on the task area or activity area

Illuminance on the task area or activity area $\bar{E}_m$ lx	Illuminance on immediate surrounding areas lx
≥ 750	500
500	300
300	200
200	150
≥ 150	<i>equal to task area</i>

# DESIGNING LIGHT LEVELS FOR THE FUTURE

## SCALE OF ILLUMINANCE

▶ 50 - 75 - 100 - 150 - 200 - 300 - 500 - 750 - 1 000 - 1 500 - 2 000 - 3 000 - 5 000

▶ Conditions to increase maintained illuminance

- ▶ errors are costly to rectify
- ▶ accuracy, higher productivity or increased concentration is of great importance
- ▶ task details are of unusually small size or low contrast
- ▶ the task is undertaken for an unusually long time
- ▶ the task area or activity area has a low daylight provision
- ▶ the visual capacity of the worker is below normal





# “OFFICE” TABLE EXAMPLE

Type of task /activity area	$\bar{E}_m$ lx		$U_o$	$R_a$	$R_{UGL}$	$\bar{E}_{m,z}$ lx	$\bar{E}_{m,wall}$ lx	$\bar{E}_{m,ceiling}$ lx	Specific requirements
	required <sup>a</sup>	modified <sup>b</sup>				$U_o \geq 0,10$			
Writing, typing, reading, data processing	500	1000	0,60	80	19	150	150	100	DSE-work, see 5.9 room brightness, see 6.7 and Annex B <b>Lighting should be controllable, see 6.2.4</b> For smaller cellular offices the wall requirement applies to the front wall. For other walls a lower requirement of minimum 75 lx could be accepted.
Conference and meeting rooms	500	1000	0,60	80	19	150	150	100	<b>Lighting should be controllable, see 6.2.4</b>

# LIGHTING CONTROL

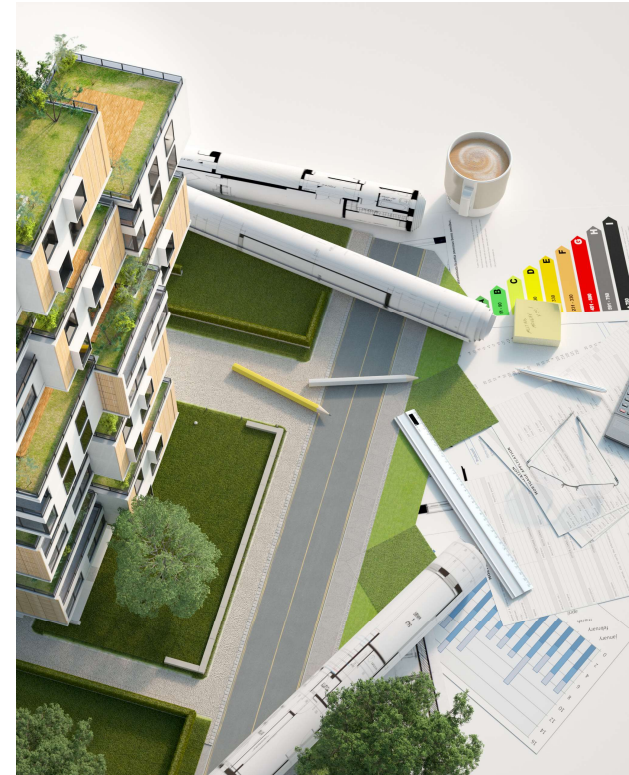
## ENERGY CONSIDERATIONS

The Norm underlines the starting phase of every lighting project;

***'Lighting should be designed to meet the lighting requirements of a particular task, activity or space in an energy efficient manner'***


It highlights the order of thinking — first, what is needed, and then explains how to do it energy-efficiently...

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# SUMMARY

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*EN12464-1 updates are welcomed  
as they encourages **people-centric**  
and **sustainable** lighting design*

# Helvar



**Creating Brighter Spaces with the new**

**European Lighting Standard EN-12464-1**

A HELVAR WHITEPAPER

JULY 2021

HENRI JUSLÉN  
CHIEF FUTURE ILLUMINATOR





# STANDARDS

ARE DRIVING  
CHANGE



# *WELL BUILDING STANDARD CONCEPTS*



AIR



WATER



NOURISHMENT



LIGHT



MOVEMENT



THERMAL  
COMFORT



SOUND



MATERIALS



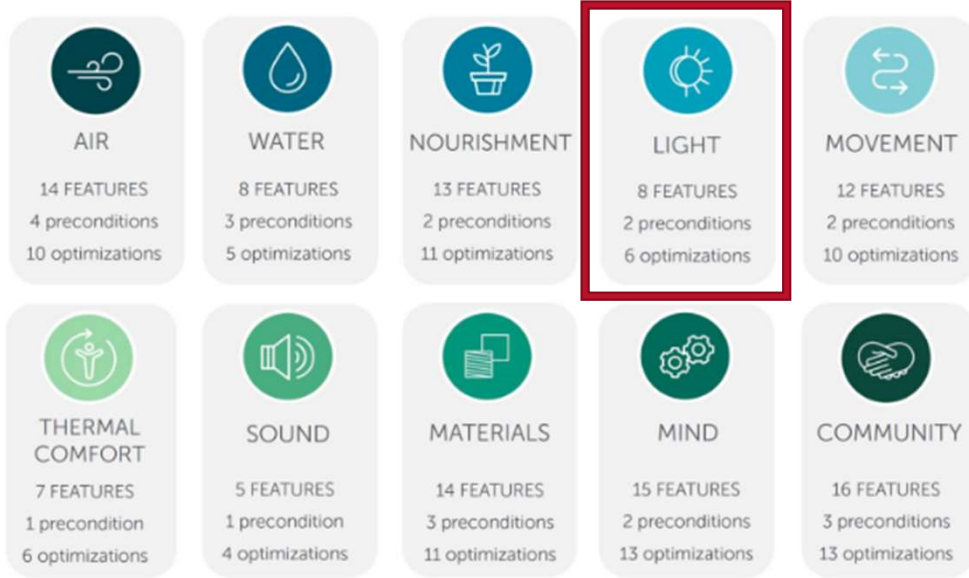
MIND



COMMUNITY

# WELL Building standard overview

## WELL v2 CONCEPTS



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- 10 concepts + innovations
- 23 mandatory preconditions
- 97 optimizations available

To get WELL Certificate:

All preconditions must be met + certain points to be earned via optimizations:

- WELL Silver: 50 points
- WELL Gold: 60 points
- WELL Platinum: 80 points







# WELL Building Standard™ version 2

UPDATED 24.11.22

Internal only - not to be distributed outside of Helvar or Helvar Partners. Refer to Helvar representative with any questions.

CATEGORY	POINTS	DESCRIPTION	REQUIREMENTS FOR LIGHTING	HELVAR IMPACT
L01 Light Exposure	Prerequisite	Provide appropriate light exposure in indoor environments through lighting strategies.	(Option 4: Circadian lighting design) Regulate indoor light exposure through daylight and electric light control strategies.	Helvar's intelligent control solutions and luminaire components can help achieve criteria for circadian lighting design as set out by the WELL Standard.
L02 Visual Lighting Design	Prerequisite	Provide appropriate illuminances on work planes for regular users of all age groups, as required for the tasks performed in the space.	Comply with various requirements for illuminance thresholds, taking into account the needs of users of the space.	Helvar's customisable solutions allow you to address the individual needs of end-users when designing the lighting system, helping to follow standards such as EN 12464-1.
L03 Circadian Lighting Design	3	Provide users with appropriate exposure to light for maintaining circadian health and aligning the circadian rhythm with the day-night cycle.	Support circadian and psychological health through indoor daylight exposure and outdoor views.	Intelligent lighting controls can be combined with Helvar's Light over Time solution to create optimal circadian lighting profiles for different spaces.
L04 Electric Light Glare Control	2	Manage glare by using strategies, such as calculation of glare and choosing the appropriate light fixtures for the space.	Minimise glare caused by electric light.	Helvar solutions allow you to precisely control the light fixture to tune luminance levels in any space.
L05 Daylight Design Strategies	4	Design spaces to integrate daylight into indoor environments, so that daylight may be used for visual tasks along with electric lighting.	Provide optimal daylight exposure indoors through design strategies.	Helvar controls can be integrated with blinds systems in order to automatically adapt to daylight levels and optimise daylight exposure in your space.
L07 Visual Balance	1	Develop and implement strategies to create a visually comfortable lighting environment.	Create lighting environments that enhance visual comfort.	Helvar solutions provide tools for maximising visual comfort for any range of activities throughout the day and night.
L08 Electric Light Quality	3	Take into account characteristics of electric light used in the space, such as color rendering and flicker.	Enhance visual comfort and minimise flicker for electric light.	Helvar offers a range of flicker-free dimmable LED drivers.
L09 Occupant Lighting Control	3	Implement innovative lighting strategies that take into account personal preferences of users, as well as their interaction with the physical space.	Provide individuals with access to customisable lighting environments.	Helvar offers multiple solutions to help create customised, personalised lighting scenes. E.g. ActiveTune, SceneSet. Note: Individual color+color temperature control requires additional capabilities in luminaires.
Innovate WELL	Up to 10	Promote the continuous evolution of WELL, by encouraging projects to propose a new intervention that addresses health and well-being in a novel way.	Positively impact occupants by supporting health and well-being in a novel way that is not covered in WELL v2.	Helvar solutions offer a range of opportunities for additional integrations and unique control requirements.



# LEED v4.1

UPDATED 24.11.22

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CATEGORY	POINTS	DESCRIPTION	REQUIREMENTS FOR LIGHTING	HELVAR IMPACT
Interior Lighting	2	Promote occupants' productivity, comfort, and well-being by providing high-quality lighting.	<ol style="list-style-type: none"> <li>1. Glare Control</li> <li>2. Color Rendering (CRI)</li> <li>3. Lighting Control</li> </ol>	Helvar solutions can precisely control light fixtures to tune the luminance levels of luminaires. Desired CRI can be achieved by selecting the right light sources and with the help of Tunable White LED Drivers. Dimmable lighting for occupied spaces is a core function of Helvar solutions.
Advanced Energy Metering	1	Support energy management and identify opportunities for additional energy savings by tracking building-level and system-level energy use.	Advanced energy metering capabilities.	Helvar Insights allows you to measure the energy consumption of your lighting systems and identify opportunities to improve your energy usage.
Daylight	Up to 3	Connect building occupants with the outdoors, reinforce circadian rhythms, and reduce the use of electrical lighting by introducing daylight into the space.	Provide manual or automatic (with manual override) glare-control devices for all regularly occupied spaces.	Helvar's intelligent lighting solutions help you to maximise the amount of daylight in your space, by working only when needed. Blinds system integrations can be set up for additional glare control possibilities.
Optimise energy performance	Up to 4	Achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use that disproportionately impact frontline communities.	<p>[Option 3]</p> <ol style="list-style-type: none"> <li>1. Lighting power reduction</li> <li>2. Daylight controls</li> </ol>	Helvar's luminaire components and intelligent lighting controls can be paired for a strong reduction in lighting energy usage through daylight and occupancy based-control. Increase energy saving opportunities further by integrating with other building systems such as HVAC and blinds.
Minimum energy performance	Required	Promote resilience and reduce the environmental and economic harms of excessive energy use that disproportionately impact frontline communities by achieving a minimum level of energy efficiency for the building and its systems.	Comply with ANSI/ASHRAE/IESNA Standard 90.1-2016, with errata or a USGBC-approved equivalent standard.	Helvar systems are futureproof by design, allowing for easy scalability and updates.
Integrative Process	1	Support high-performance, cost-effective, equitable project outcomes through an early analysis of the interrelationships among systems.	Identify and use opportunities to achieve synergies across energy-related systems.	Helvar Insights works together with intelligent sensors to deliver actionable lighting data reports, allowing you to adjust lighting levels according to space- and energy usage. Optimise for occupant wellbeing without compromising on energy usage.
Innovation	Up to 5	Encourage projects to achieve exceptional or innovative performance to benefit human and environmental health and equity. To foster LEED expertise throughout building design, construction, and operation and collaboration toward project priorities.	Achieve significant, measurable environmental performance using a strategy not addressed in the LEED green building rating system.	Helvar solutions offer a range of opportunities for additional integrations and unique control requirements.
Grid harmonisation	Up to 2	Increase participation in demand response technologies and programs that make energy generation and distribution systems more affordable and more efficient, increase grid reliability, and reduce greenhouse gas emissions.	Participate in demand response programs through load shedding or shifting.	Helvar Insights enables real-time control of many lighting parameters according to Smart Grid needs.





**BREEAM International**  
New Construction + Refurbishment

UPDATED 23.11.22

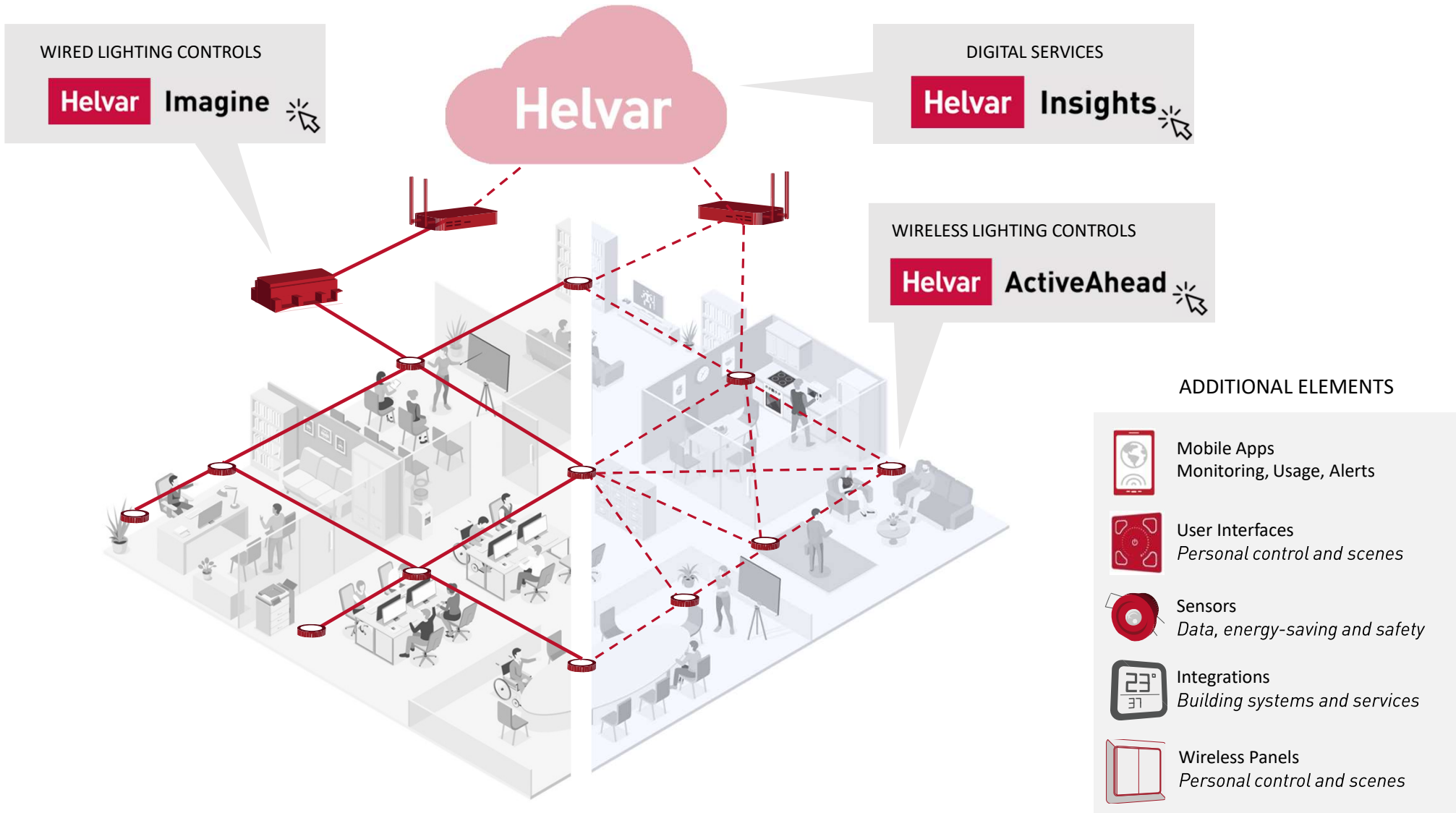
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CATEGORY	POINTS	DESCRIPTION	REQUIREMENTS FOR LIGHTING	HELVAR IMPACT
<b>Hea 01 Visual comfort</b>	Up to 2	Ensure daylighting, artificial lighting and occupant controls are considered at the design stage to ensure best practice in visual performance and comfort for building occupants.	Glare control Daylight harvesting Internal and external lighting	Helvar solutions allow you to fine-tune your lighting system to precise requirements across a variety of spaces, while delivering optimal visual comfort for building occupants.
<b>Ene 01 Reduction of energy use and carbon emissions</b>	Up to 4	Minimise operational energy demand, primary energy consumption, and CO <sub>2</sub> emissions.	Energy efficient design features e.g. occupancy-based lighting control. Adequate lighting controls must also be provided to all ancillary areas (as applicable).	Helvar's luminaire components and intelligent lighting controls can be paired for a strong reduction in lighting energy usage through daylight and occupancy based-control. Increase energy saving opportunities further by integrating with other building systems such as HVAC and blinds.
<b>Ene 02a Energy monitoring</b>	Up to 2 credits	Encourage the installation of energy sub-metering to allow monitoring of operational energy consumption. Allow managers and consultants post-handover to compare actual performance with targets in order to inform ongoing management and reduce any performance gap.	Energy metering for lighting-specific energy usage.	Helvar Insights allows you to measure the energy consumption of your lighting systems and identify opportunities to improve your energy usage.
<b>Ene 03 External Lighting</b>	1	Recognise and encourage the specification of energy efficient light fittings for external areas of the development.	Output of external light fittings can be controlled through e.g. daylight harvesting, presence detection.	Helvar's precise and durable control solutions can easily be implemented for outdoor applications. e.g. Facade lighting, Infrastructure lighting

# Our Lighting Control Solutions

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# DALI Front Runners

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Alliance

Founding members of DALI Standard and we're on the DALI Alliance Board



We've been at the forefront of lighting technology for 75 years



Helvar invented the worlds first DALI lighting control products



Leading the way with 2<sup>nd</sup> highest number of DALI-2 Certified Products

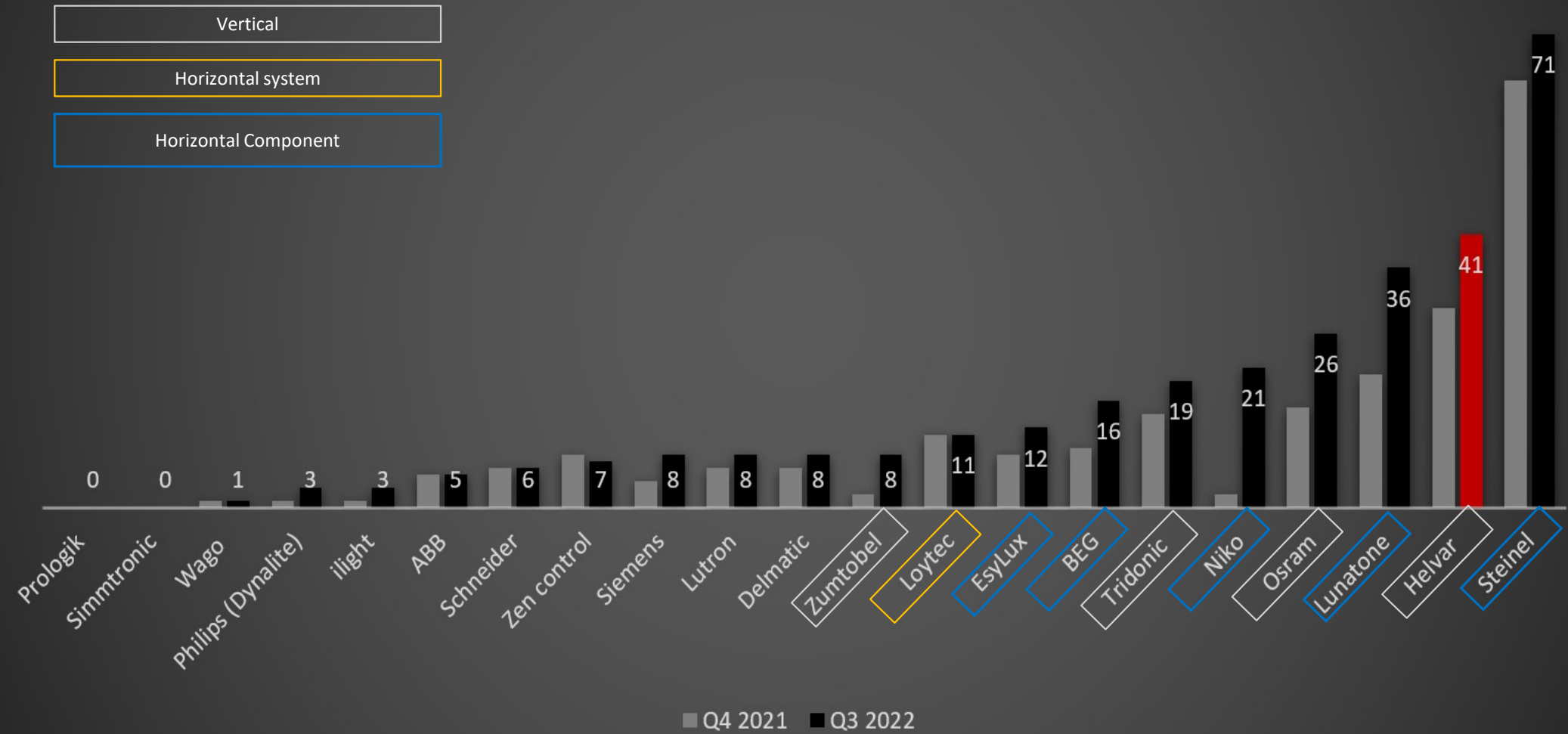
# Certified DALI-2 Controls Products

Top 10 Highlights

Vertical

Horizontal system

Horizontal Component



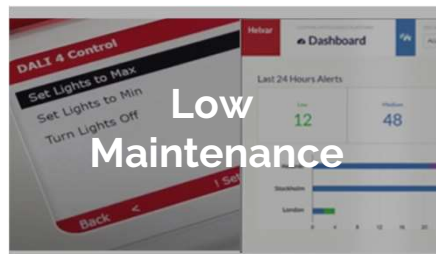


# The Benefits of Helvar Imagine

## Main Customer Requirements



## Helvar Imagine Solution Benefits



# Key Products



**Application  
Controllers**



**Sensors**



**Panels**



**Apps and GUIs**



**Integration**



**Load Controllers**



Helvar

Imagine

# Easy to Install

DALI or DALI-2 = very simple compared to other lighting control networks.

- ✓ Open protocol
- ✓ Polarity & Topology free (part from loop networks)
- ✓ Non specialist 2 core cable
- ✓ Lighting and controls on same network



## 950 Application Controller

Key features (in-built)

- 4 x DALI-2 Multi-master networks
- LCD for DALI network testing and alerts
- DALI-2 controls
- Helvar DALI devices (DigiDim)
- Astronomical Timeclock and Scheduler
- Emergency Lighting
- Light over time
- Configuration stored in system



Examples: Type 6 (LED), Type 8 (Tunable White), Type 1 emergency



Part 301  
Push Buttons



Part 302  
Absolute Input



Part 303  
Occupancy  
Sensor



Part 304  
Light Sensor

# Imagine Sensor Range



*coming soon	Light only	Presence only	Light + Presence
<b>General Areas</b>	 329	 318  320  320D2  313	 315  321  321D2  IR Quattro HD  HF360
<b>Corridor</b>		 341  341D2*	 314  Dual HF
<b>High Bay</b>			 322  322D2  IS 3360 MX  IS 345 MX



# Imagine Panel Range



## Simple

## Mid range



444  
444D2



93x



12x



14xxD2



13xx  
13xxD2



## Specialist/ High end



16xx



18xx



ILLUSTRIS



SceneTouch



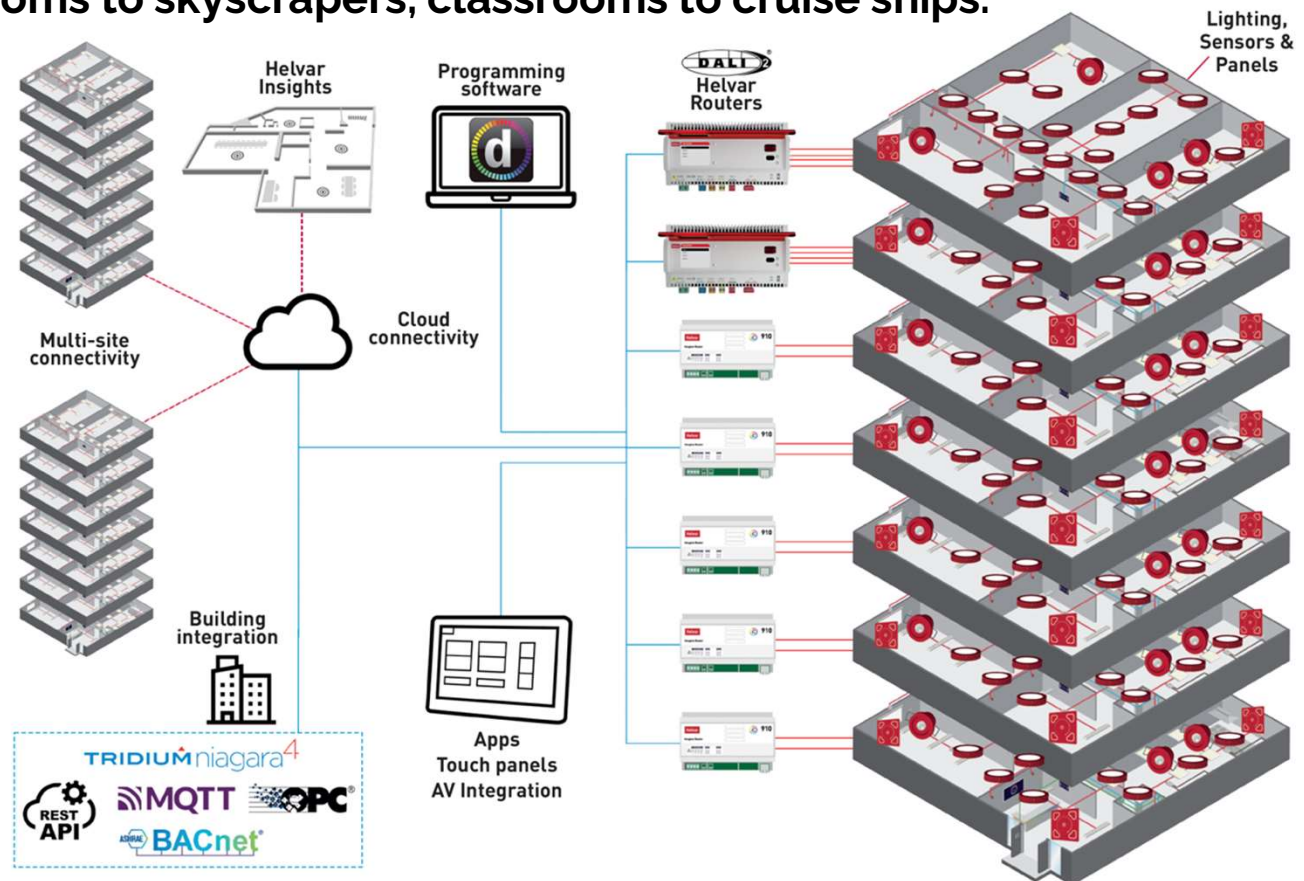


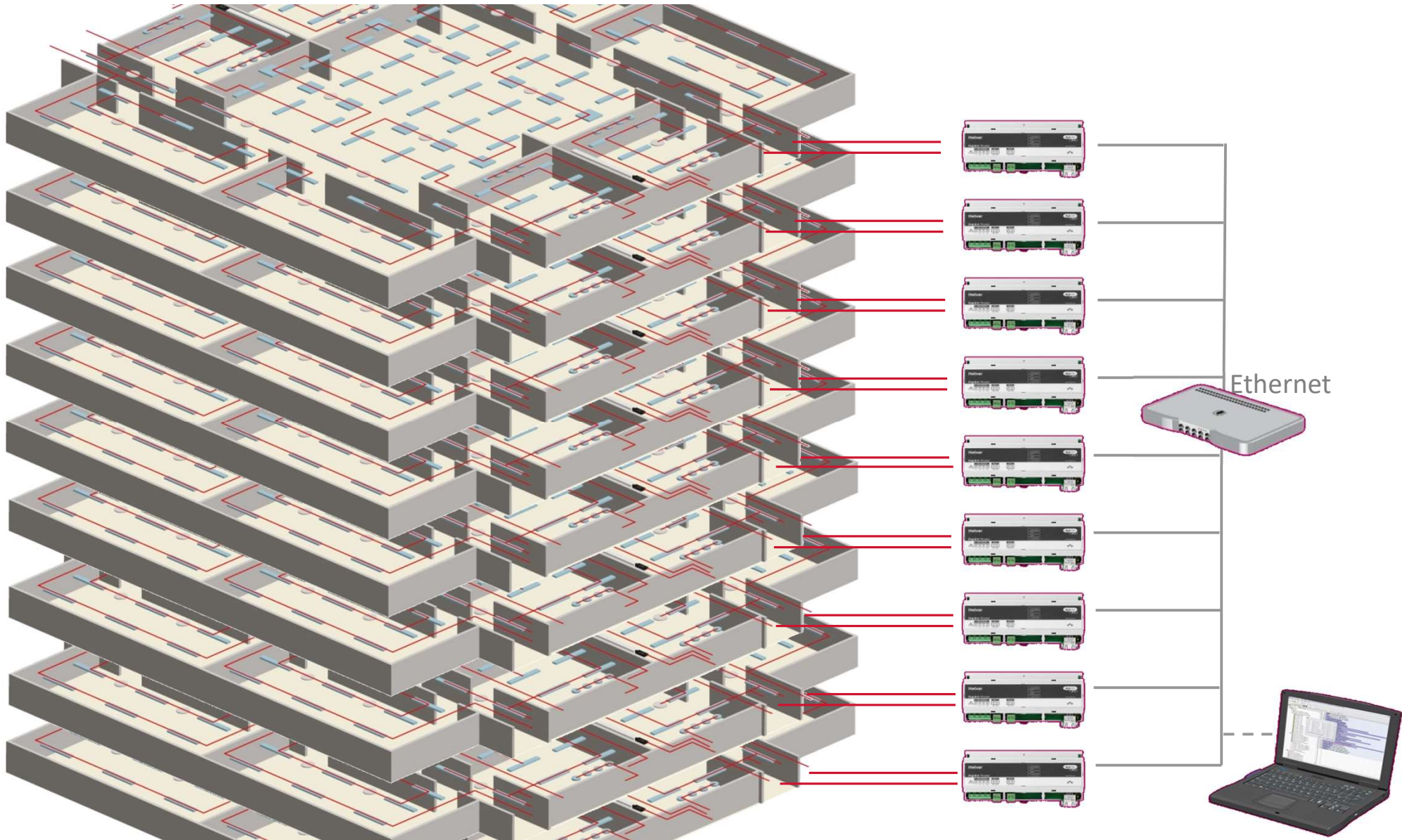
Helvar

Imagine

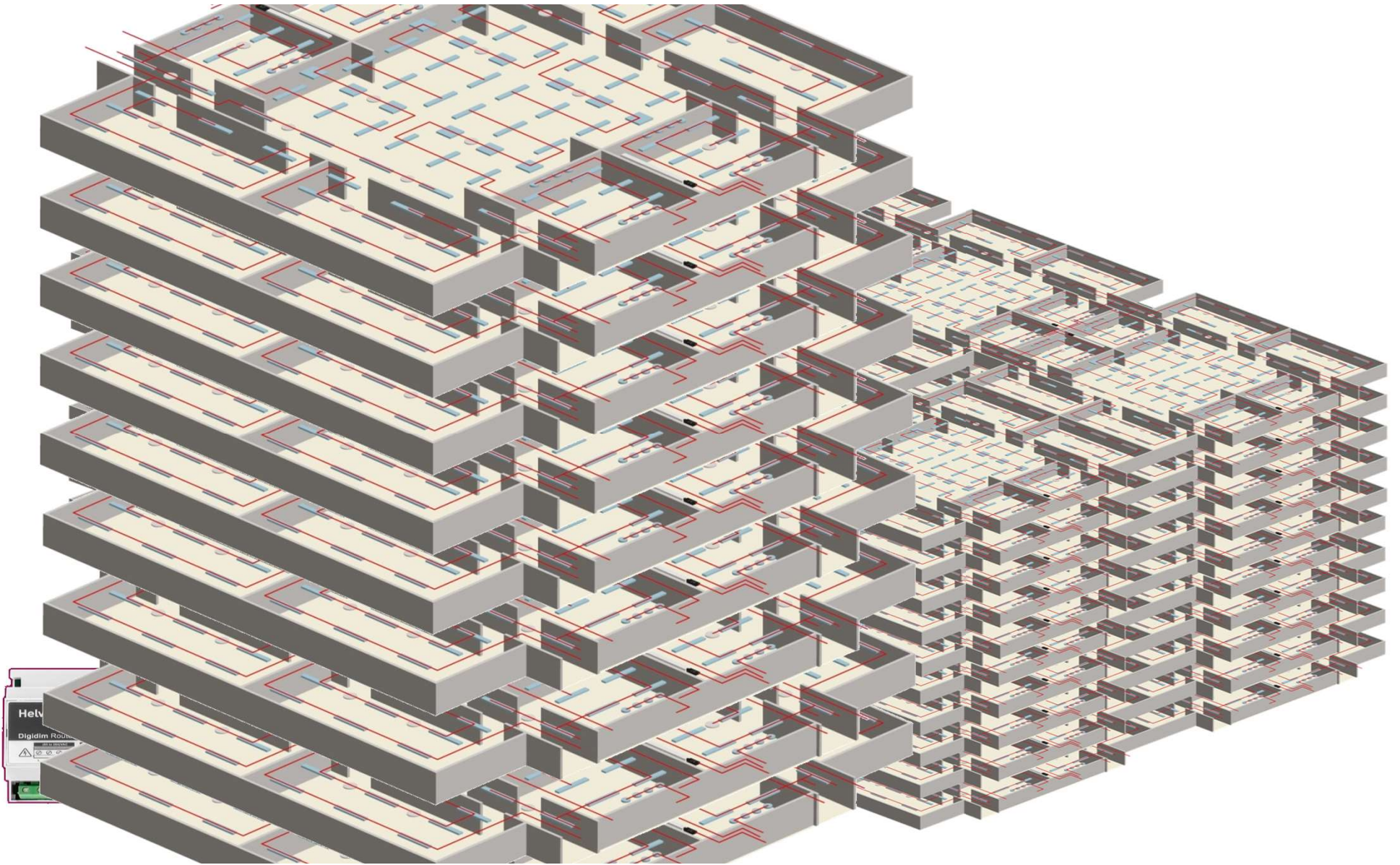
# Scalability

Helvar Imagine is **perfect for projects of all sizes**, from meeting rooms to skyscrapers, classrooms to cruise ships.





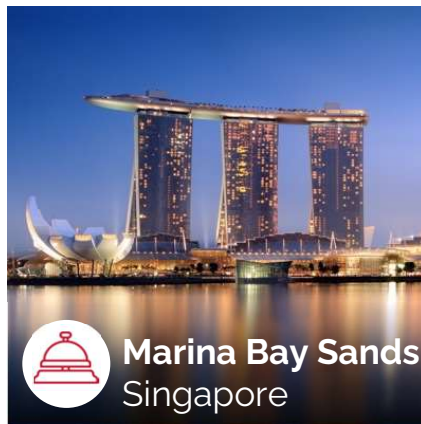




Helvar

Imagine

# Project References





Helvar

ActiveAhead

# Introducing Helvar ActiveAhead

- Wireless
  - BLE Mesh
- Out-of-the-box
  - One network
- Mobile App
- Wireless and DALI
- Cloud Services
- BMS Integration



Helvar

ActiveAhead

# Helvar ActiveAhead Benefits

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EFFICIENT

**the easiest to design,  
set-up and operate**



ENERGY SAVING

**biggest savings in the market  
thanks to dense sensor  
network and smart features**



SCALABLE

**suits to new build and  
renovation, both small  
and large projects**



ADAPTABLE

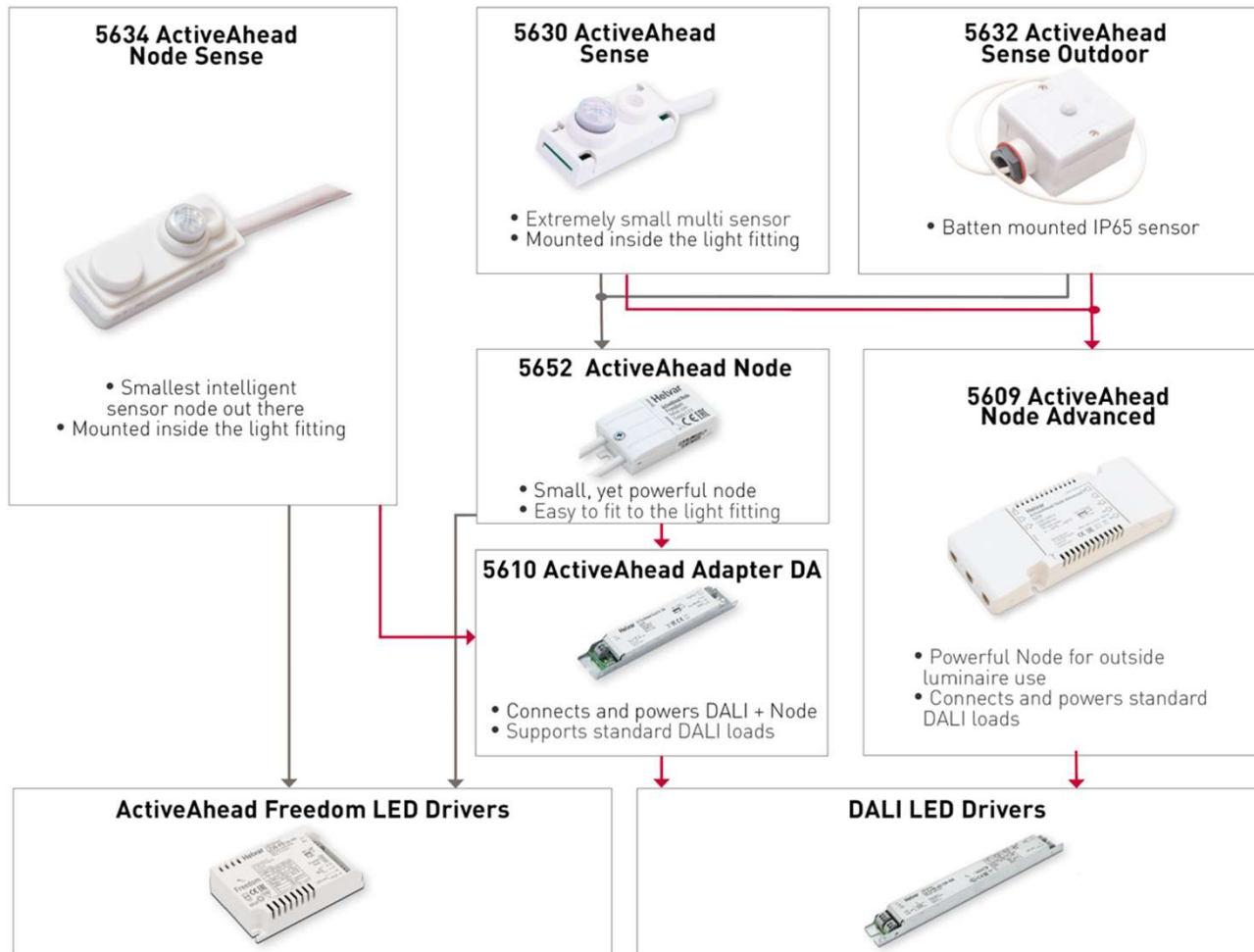
**add configurations flexibly  
on top of automatic  
operations where needed**

Helvar

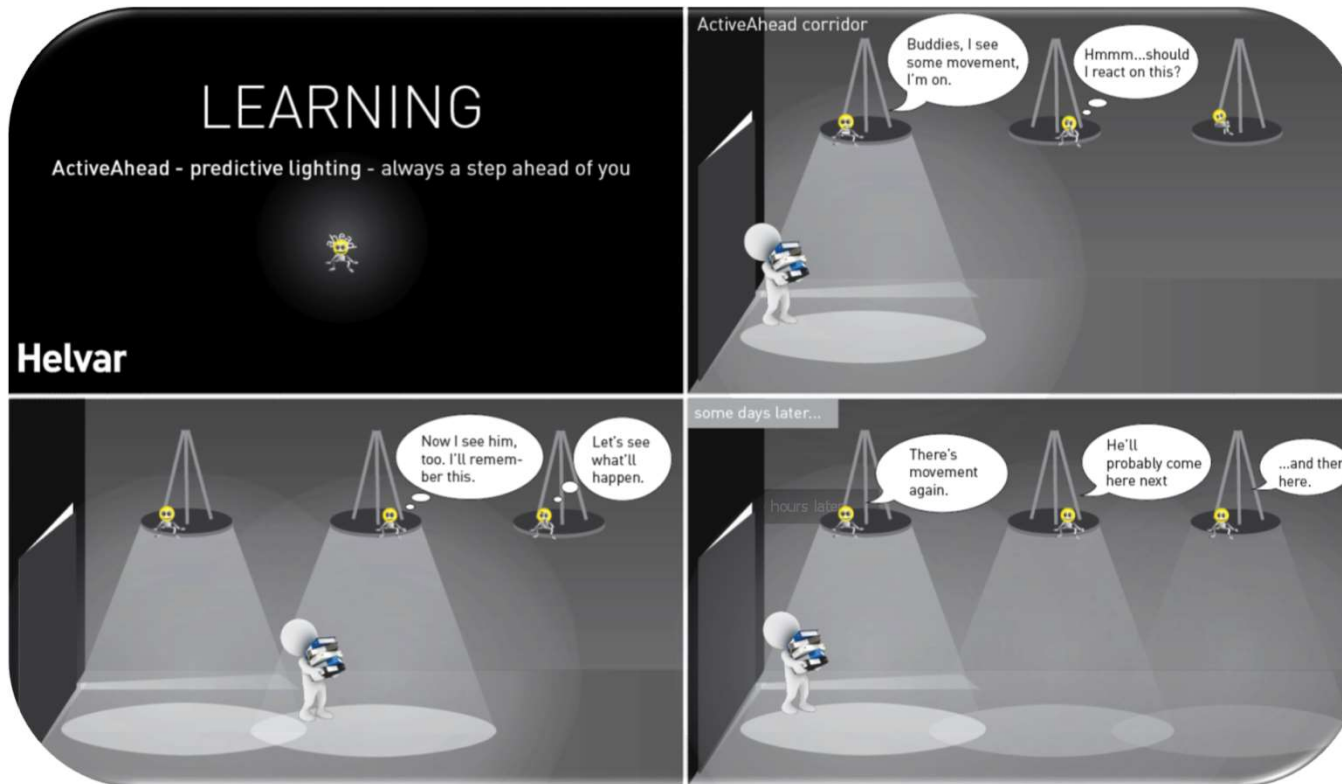
ActiveAhead

# Helvar ActiveAhead Devices

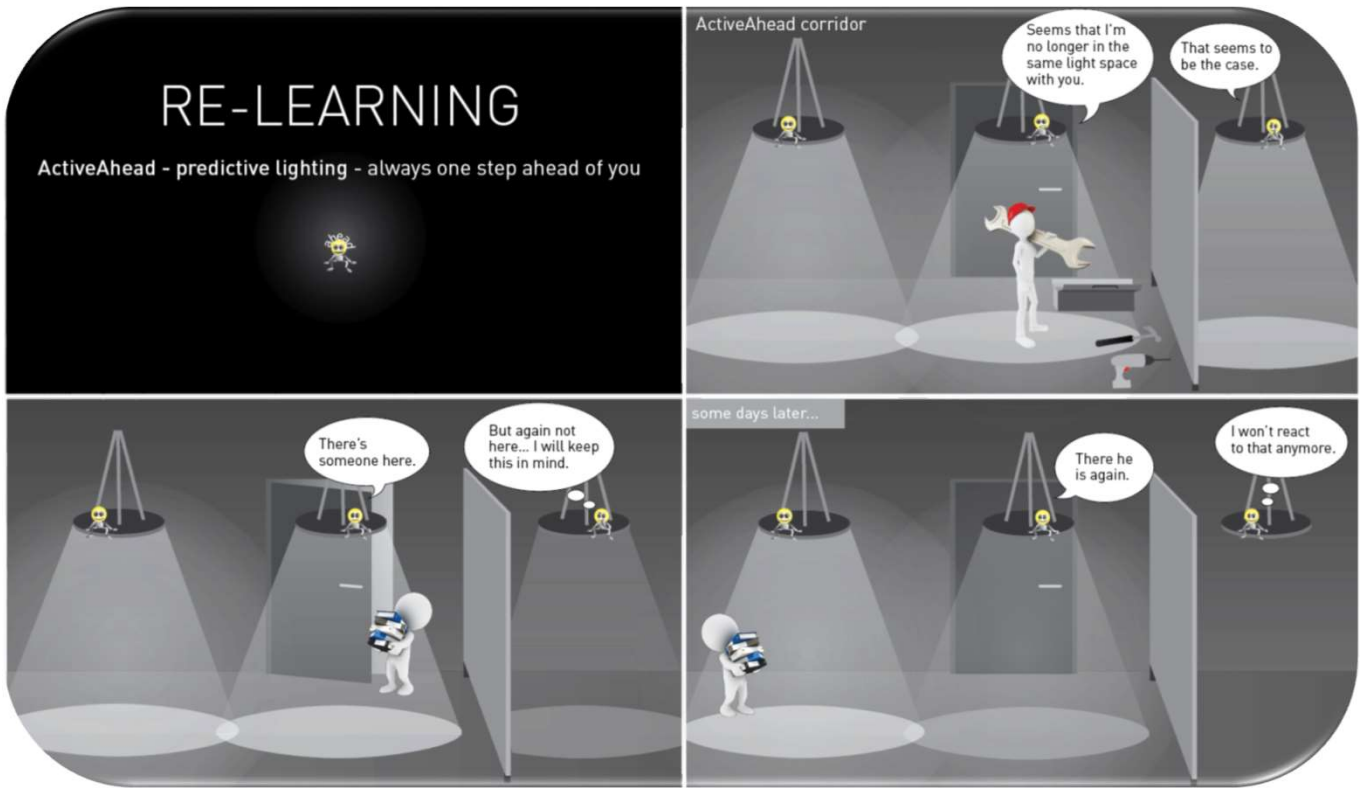
ActiveAhead and / or DALI luminaires and devices



# Learning Starts When Power Goes On



# Re-Learning Logic





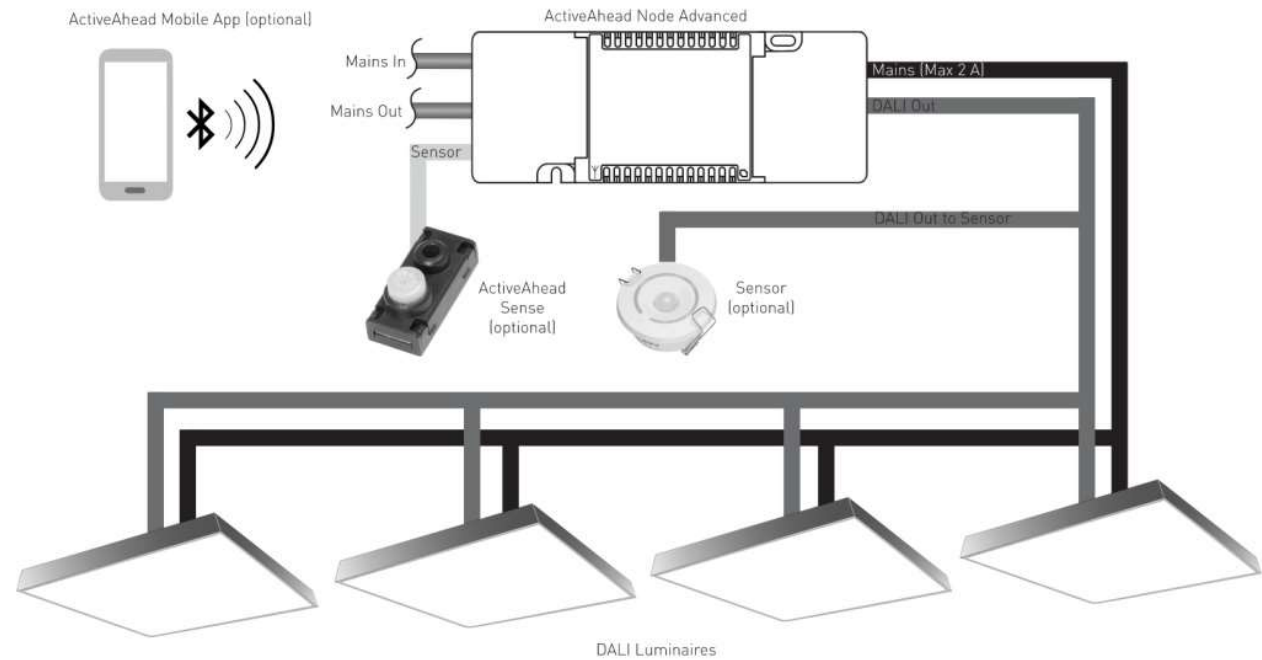
Helvar

ActiveAhead

# Helvar ActiveAhead Devices

ActiveAhead and / or DALI luminaires and devices

## Installation Diagram



Helvar

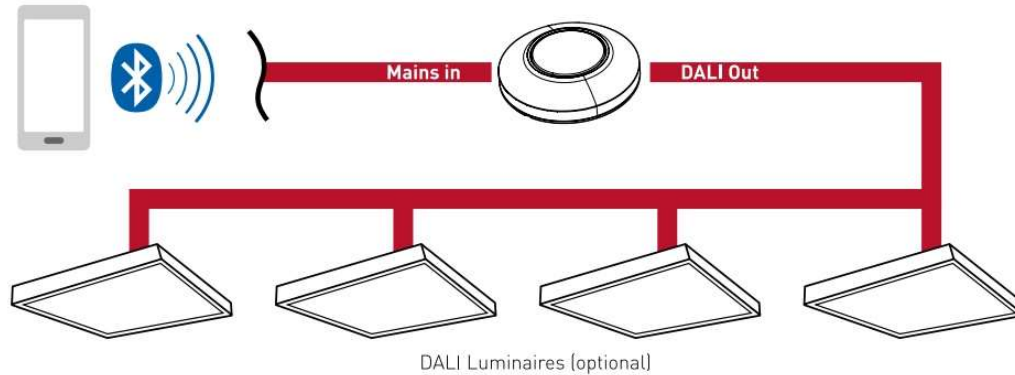
ActiveAhead

# Helvar ActiveAhead Devices

ActiveAhead and / or DALI luminaires and devices

## Installation Diagram

ActiveAhead Mobile App (optional)



Helvar

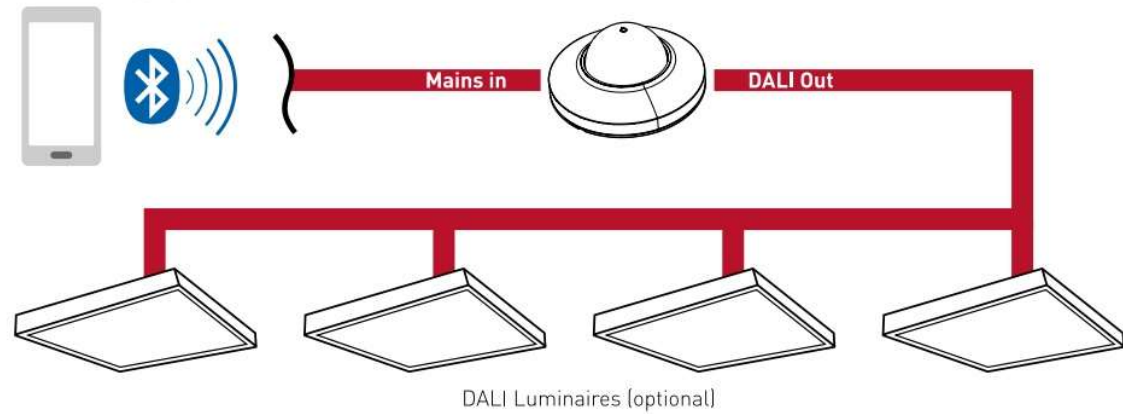
ActiveAhead

# Helvar ActiveAhead Devices

ActiveAhead and / or DALI luminaires and devices

## Installation Diagram

ActiveAhead Mobile App (optional)



Helvar

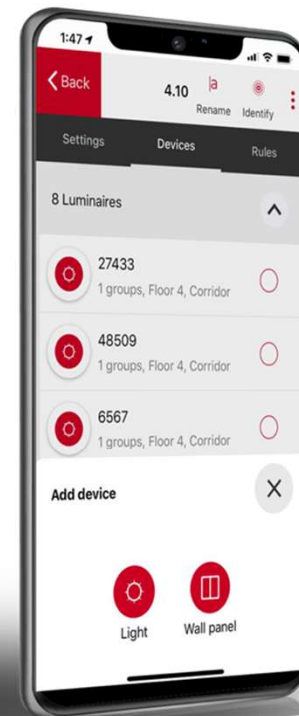
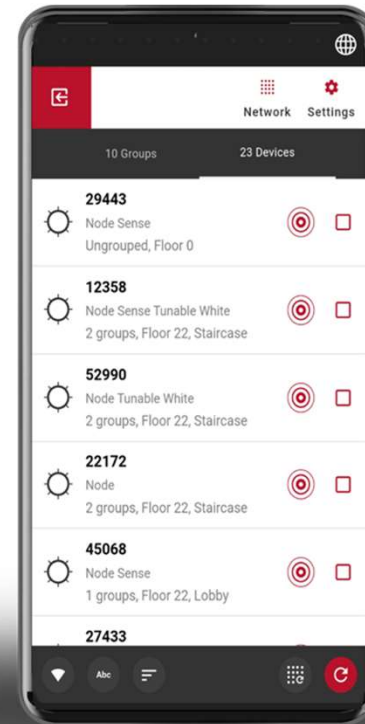
ActiveAhead

# Customisation via App

The super-easy mobile app enables full customisation of ActiveAhead



ActiveAhead



Helvar

ActiveAhead

# Personal Lighting

With ActiveTune, control the lighting at your desk via QR code - simple.

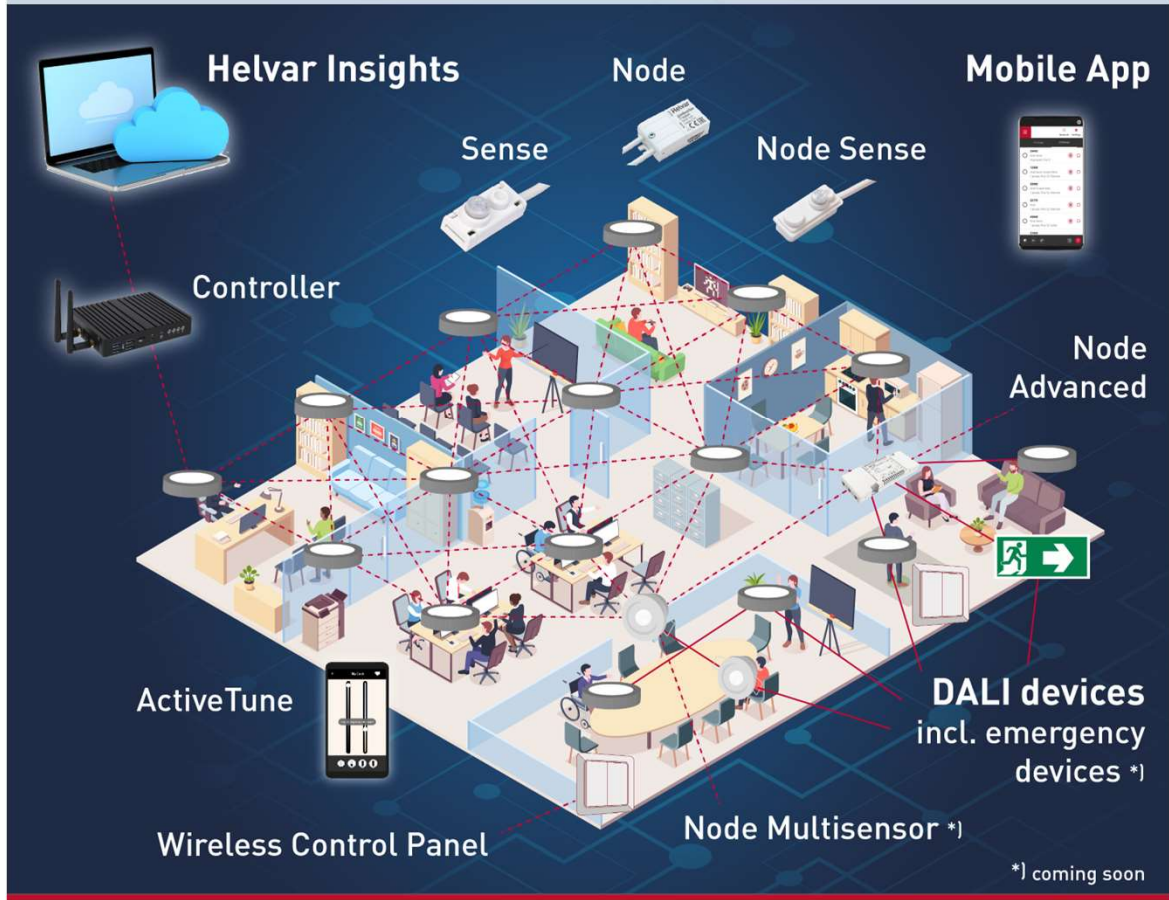


ActiveTune





HELVAR ACTIVEAHEAD  
**SELF-LEARNING WIRELESS**  
LIGHTING SOLUTION



**Helvar**

TURNING EVERYDAY PLACES  
INTO BRIGHTER SPACES

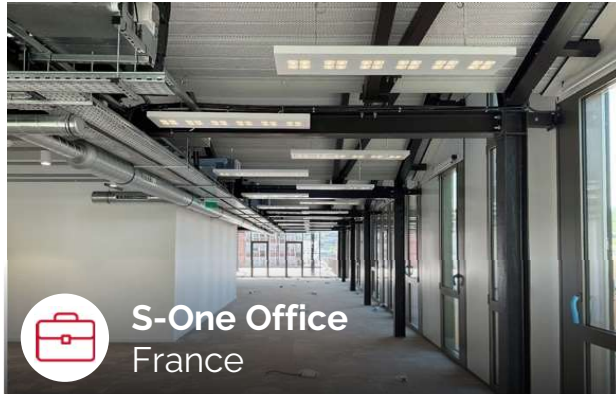
Read more:  
[helvar.com/activeahead](https://helvar.com/activeahead)

Helvar

ActiveAhead

# Project References

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S-One Office  
France



Ramboll HQ  
Finland



Bravida HQ  
Sweden



Sale Käikälä  
Finland

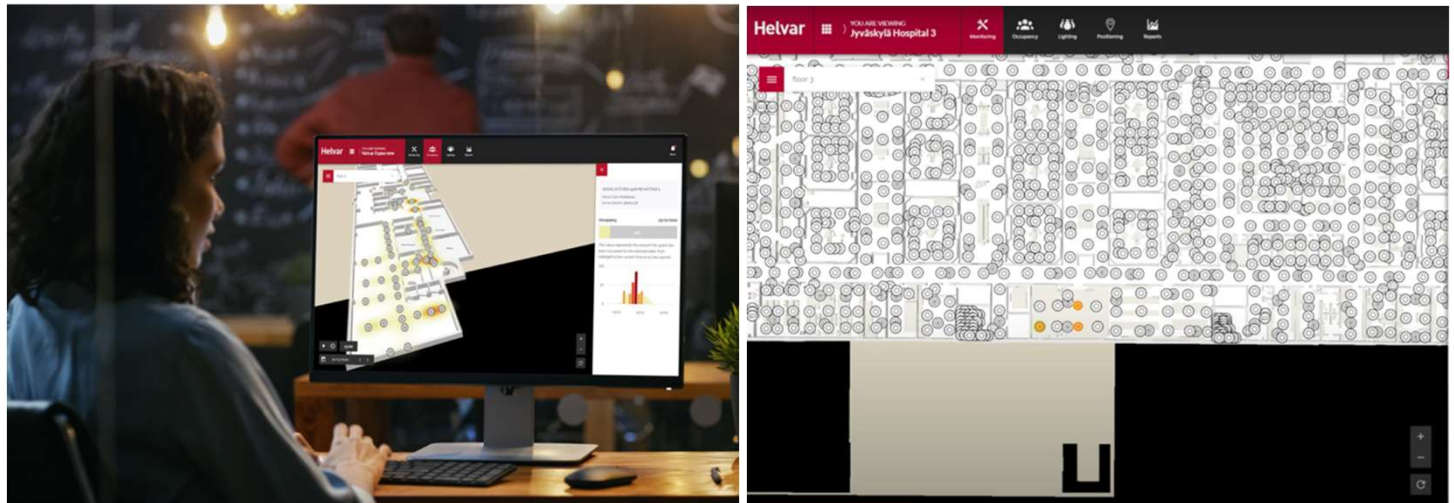


Solutions

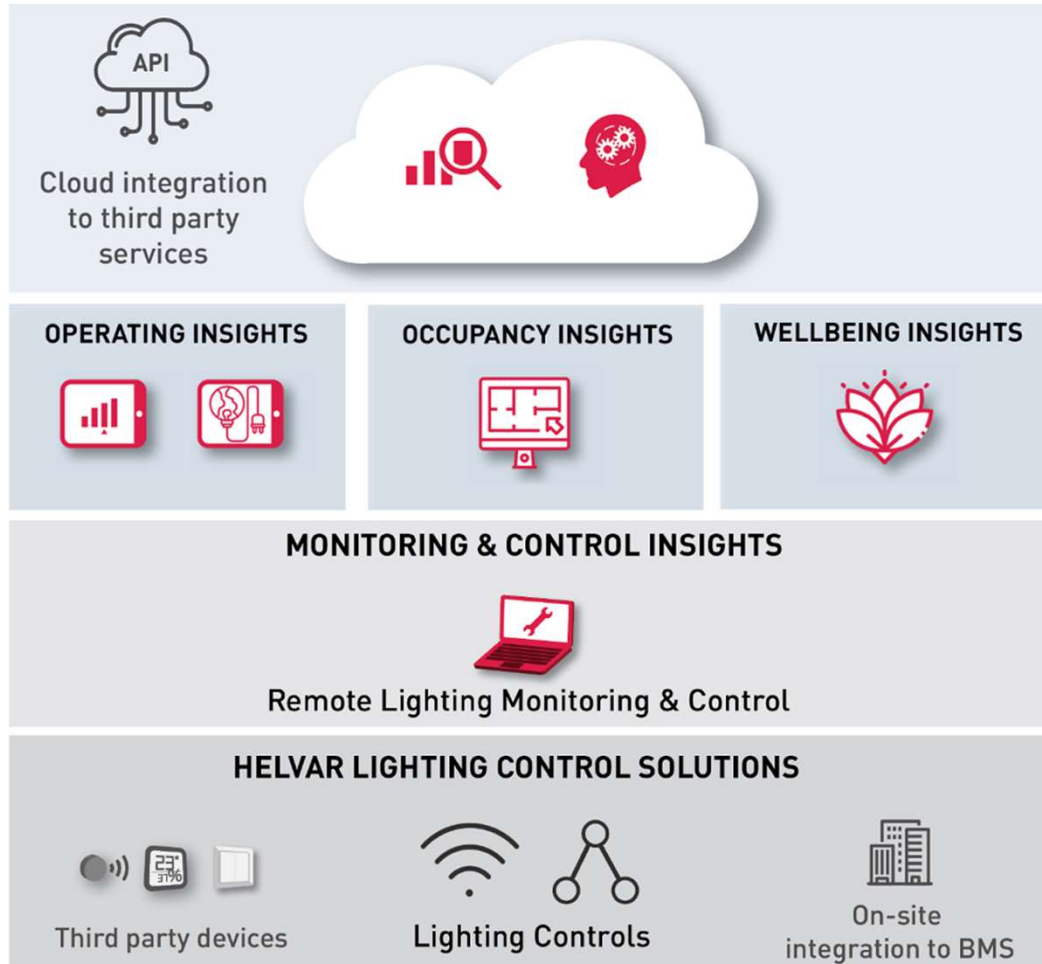
# Helvar Insights

Helvar Insights is a **scalable cloud-based suite of digital services** that takes advantage of data gathered from your existing commercial lighting control systems, devices and sensors.

It provides intelligent insights that improve the wellbeing of users, the efficiency of your building and help achieve sustainability targets.



# Insights Modules





# Monitoring & Control Insights



Helvar

## Helvar Monitoring & Control Insights

Save time & money in maintenance with ...

- Graphical User Interface
- Remote access
- System alerts & maintenance recommendations
- Alert and Event Logs
- Sensor Optimisation reports\*
- Emergency Light testing + reporting



Optimise & control your lighting with ...

- Remote scene selection
- Lighting schedule management
- Sensor time-out Optimisation\*



\*Not ActiveAhead

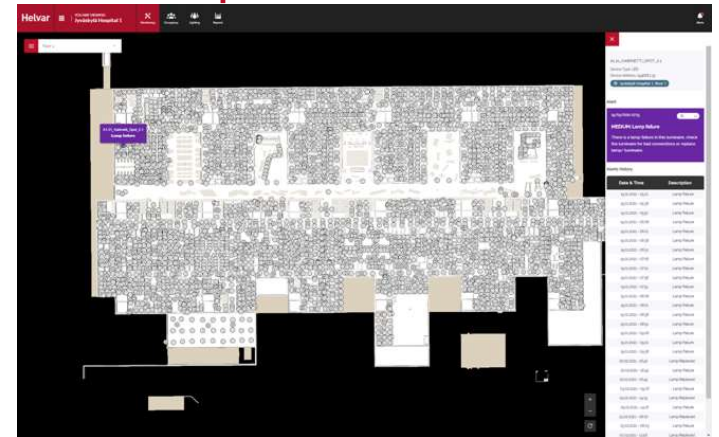
## TIMER OPTIMIZATION



■ Current timer  
**30 mins**  
■ Recommended timer  
**6 mins**



**83.8 hours**

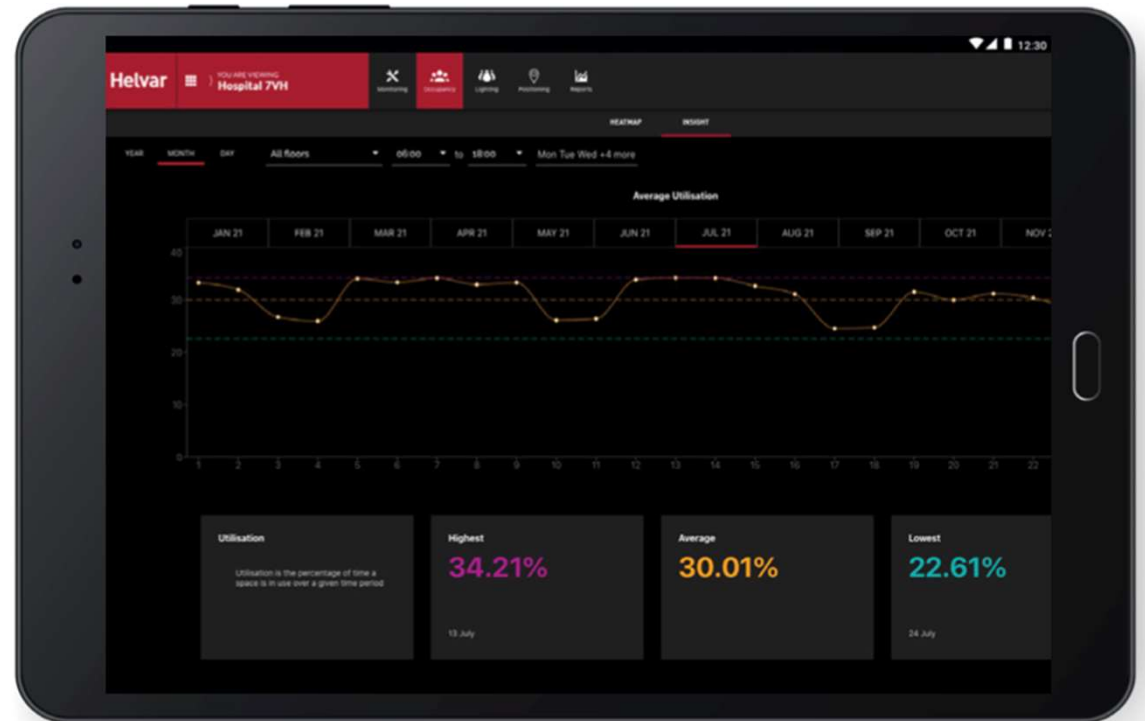
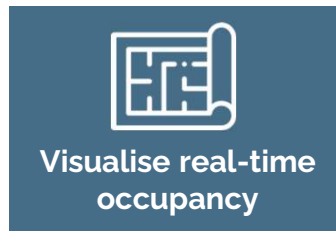




# Occupancy Insights



**Occupancy Insights** allow you to monitor the occupancy of your space using existing sensor movement data. This data can then be visualised for the entire space, or for individual areas, allowing you to see how your spaces are truly used, and where improvements could be made – either by adapting how spaces are used or by highlighting cost saving opportunities.



# Energy Monitoring



**Energy Monitoring with Helvar Insights helps you** monitor the usage of your Helvar lighting control systems. The simple dashboard allows you to analyse lighting energy usage throughout a whole building or specific space types, such as, meeting rooms or in single spaces, with a user-friendly graphical user interface.



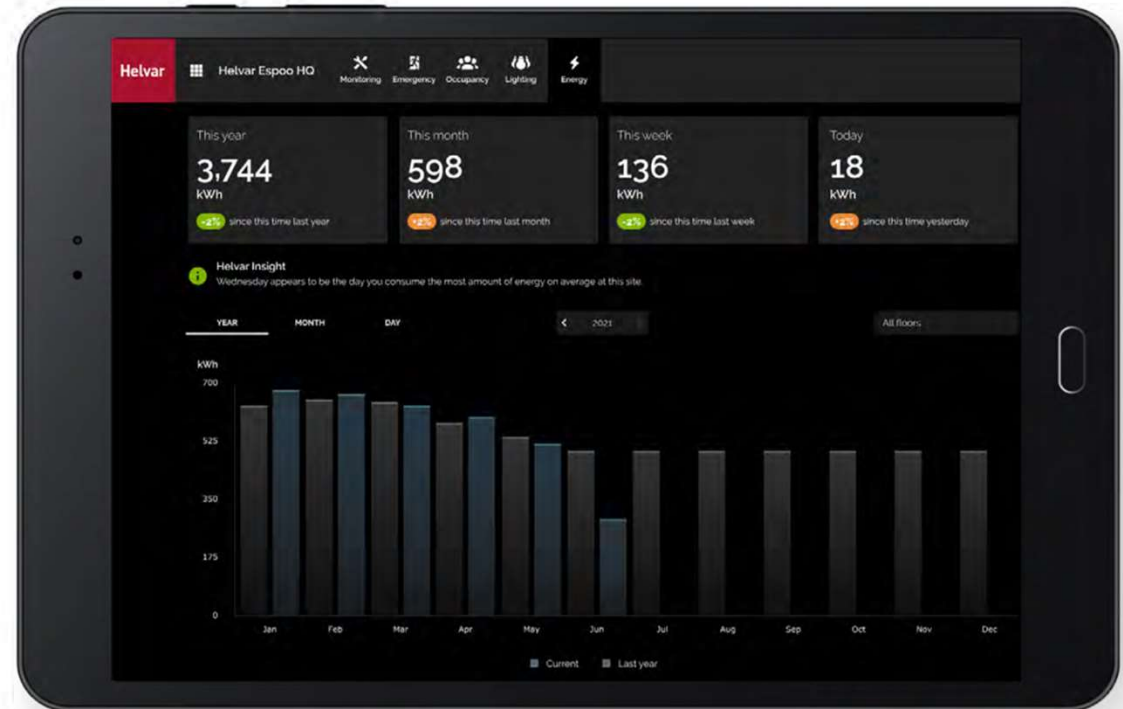
Identify areas of improvement



Monitor targets for sustainability



Support ESG reporting

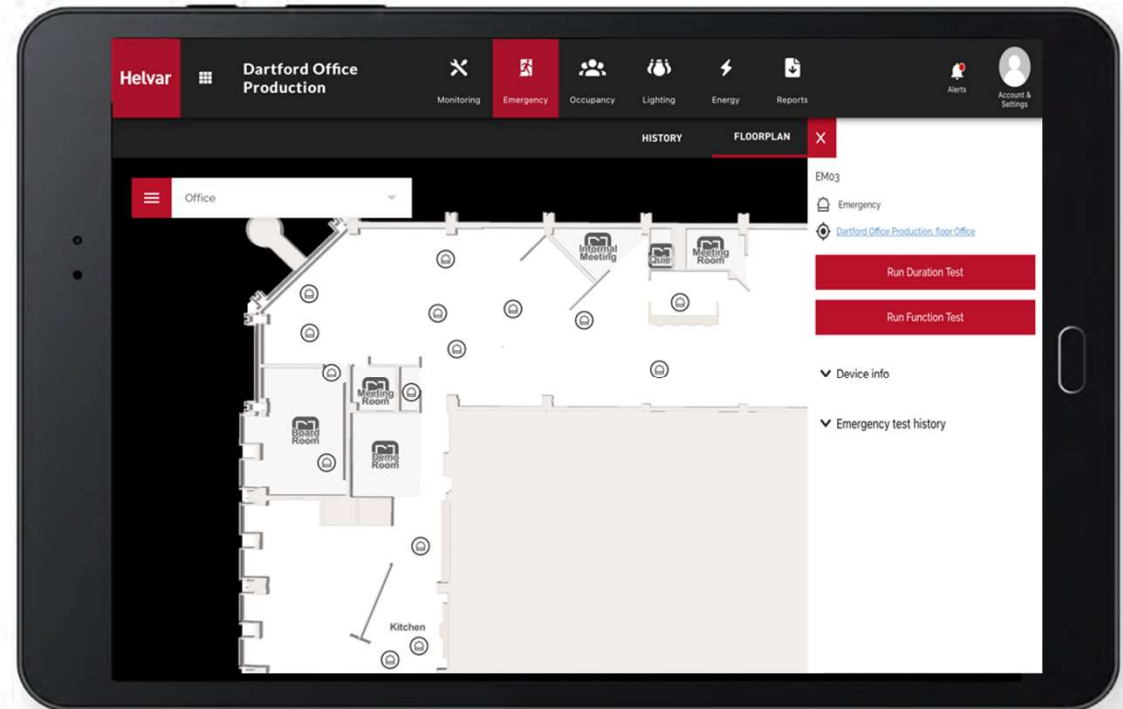
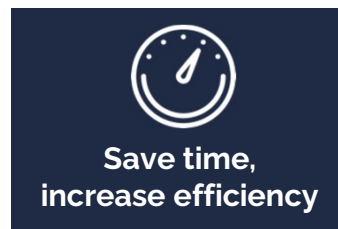
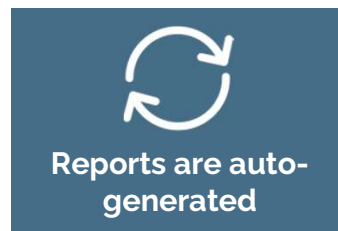
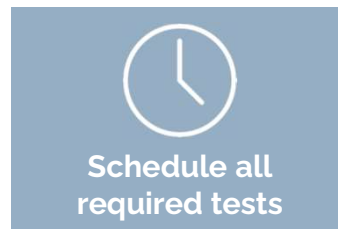


# Emergency Lighting Testing

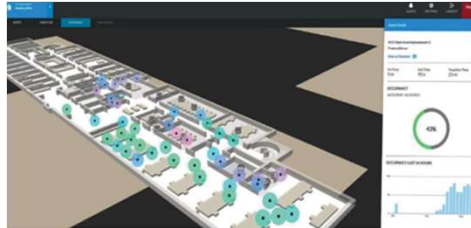


DALI self-contained emergency luminaires connected to a Helvar lighting control system with Helvar Insights allows you to automate all the statutory tests required, meaning there is no need for expensive manual testing outside of office hours!

<https://service.helvar.io/>

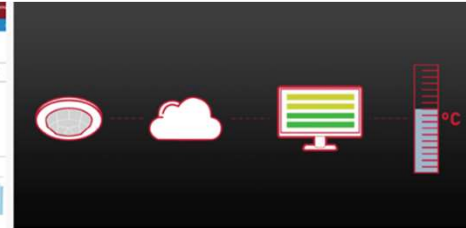


# Helvar Insights Features



## Occupancy heat maps

Animated heat maps to visualise how occupants use a building.



## Smart system integration

Integrate occupancy data with HVAC and room-booking systems.



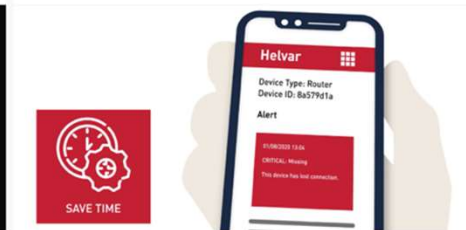
## Ultimate optimisation

Automated reporting gives visibility on space usage throughout a space.



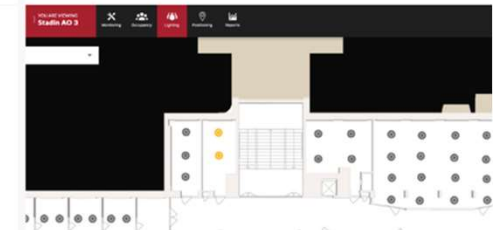
## 24/7 remote monitoring

The secure, server-less lighting monitoring system - accessible anywhere, anytime.



## Real-time notifications

Instant e-mail notifications with severity levels to keep you on top of any maintenance issues.



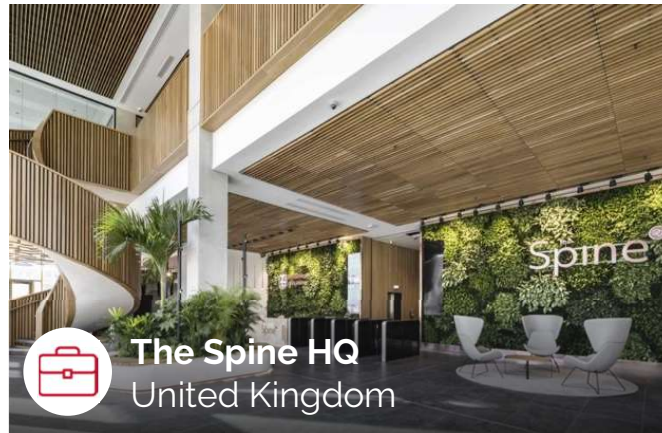
## Remote lighting control

Select scenes in real time or create easy-to-use online schedules. Digital lighting control, reimagined.



# Project References

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**Thank you**