

ActiveAhead  
Intelligent Wireless System

Helvar







ActiveAhead lighting control solution was chosen for the Wärtsilä Headquarters.

## TRULY INTELLIGENT WIRELESS LIGHTING CONTROL

**HELVAR ACTIVEAHEAD®** is a truly intelligent and scalable end-to-end wireless lighting solution designed for future-proof spaces. Its unique self-learning capabilities give ultimate efficiency in setup and operations. ActiveAhead will continuously learn and generate insights, maximising positive impact on wellbeing and optimising your ever-evolving building. The perfect solution for offices, warehouses, retail, stairways and parking garages.

# THE UNIQUE BENEFITS – INTELLIGENCE



Ramboll chose Helvar's hybrid-lighting solutions for its smart building headquarters in Finland

## SELF-LEARNING

Wirelessly networked ActiveAhead Nodes use a smart algorithm to learn how the space is used. They also respond to the amount of natural light in the space.

The luminaires collect data from their own sensors as well as from the other luminaires that surround them. The Nodes communicate with each other and learn the patterns of how the space is used. Due to its intelligence, the lighting level remains optimal for the user at all times, giving the right lighting at the right time and place.

## ALWAYS ADAPTING

ActiveAhead continuously adapts to possible changes, for example, a wall installation or removal, or a change in the layout of a space. Continuous learning means that the system adjusts lighting automatically without the need for manual re-configuration.

## FORWARD-THINKING

Intelligent ActiveAhead leverages the advantages of a wireless Mesh-based distributed architecture, providing benefits that extend far beyond the mere elimination of control cables. The ActiveAhead Mesh network scales to a large number of Nodes, meaning you can easily expand your installation when there are needs to expand over the building lifetime.

With its future-proof design, the system delivers scalability, efficiency, flexibility, and openness, making it a cutting-edge solution for all modern lighting control needs.

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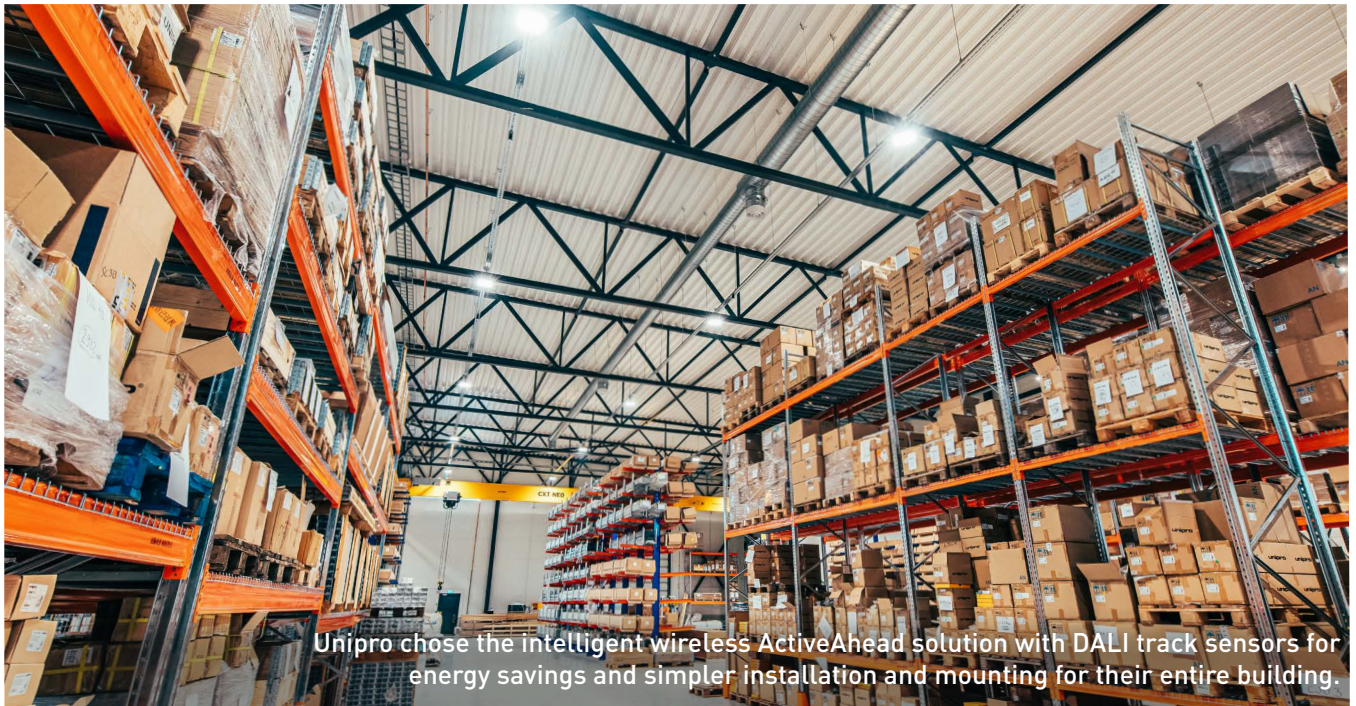
We were looking for a smart solution which enables us to adjust the entire buildings lighting to suit all of our needs today and in the future... enabling us to avoid wasting both energy and money.

GEORGE SKELLY - Area Sales Manager, Unipro

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# THE UNIQUE BENEFITS – EFFICIENCY



Unipro chose the intelligent wireless ActiveAhead solution with DALI track sensors for energy savings and simpler installation and mounting for their entire building.

## ENERGY SAVINGS

Compared to an LED-based switched luminaire, ActiveAhead takes comfort to a totally new level while offering substantial energy savings. In addition to increasing the lights in a predictive manner, the Nodes dim the lights in a smart way depending on the space usage, thus helping to save energy.

## SIMPLE INSTALLATION

Luminaires fitted with ActiveAhead are extremely easy to install. Just fix the luminaires to their intended position and switch on the mains. No control wiring, programming or configuration is needed. Optional customisation and grouping are possible using the ActiveAhead mobile app.

## FUTURE-PROOF SOLUTION WITH CLOUD CONNECTIVITY

Connect ActiveAhead wireless lighting solution to Helvar Insights to take advantage of the data gathered from your lighting control network and add the power of cloud-based analytics to improve wellbeing, efficiency and sustainability.

Lighting energy monitoring brings awareness and highlights saving potential, use the data from movement sensors to optimise your space, and ensure your lighting solution is working as it should be with 24/7 monitoring.

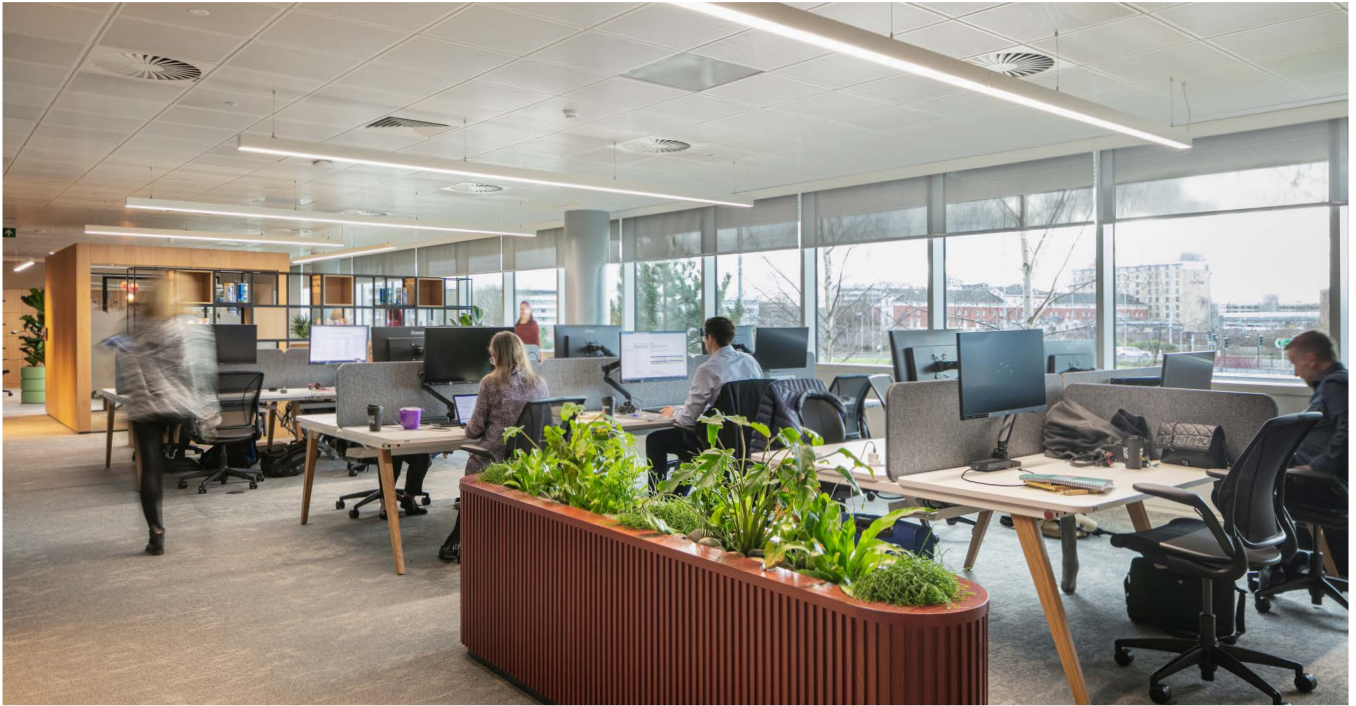


One of the smart building features of the Helvar system is that it enables us to collect occupancy data for all spaces. This helps us understand how our building is used and it's in line with our smart building ambition.

KARI MELANDER - Development Director, Ramboll



# THE UNIQUE BENEFITS – WELLBEING



## ENHANCED COMFORT

An ActiveAhead Node starts learning from the moment it's powered up and it never stops.

With ActiveAhead, your building will always stay one step ahead. It identifies your regular patterns and routes and automatically turns on the lights as you go along. With predictive lighting, lights can be automated and can be switched on before you arrive.

## PERSONAL LIGHTING

You can also tune the light settings on your very own desk according to your needs, allowing you to manage the light settings you prefer. This can result in a boost in satisfaction and productivity since we all feel better in environments that are tuned to our own needs.

## CONSTANTLY EVOLVING

ActiveAhead is designed for a data-driven future. Stay connected to the forefront of innovation as the wireless ActiveAhead solution pioneers advancements in smart technology integration for the benefit of its users' wellbeing and for optimising energy and maintenance costs while keeping high operational efficiency and safety.



As we changed the layout of our office from a small-room office layout into an activity based open plan office, we wanted the lighting level to be the same in all areas when people move from one place to another. At the same time, we also wanted to be able to control the lighting system based on personal needs.

PIRJO PERNU - Director, Facilities at YIT





# ACTIVEAHEAD CASE STUDIES



With ActiveAhead solution SALE store at Käikälä keeps the luminaires smartly on the wanted levels based on the occupancy of the store.

## Bravida office, Sweden

When the installation company Bravida Linköping changed premises, one of the key requirements was to ensure that good and even lighting was set up for the workplace and that the new indoor lighting norm was met.

They, therefore, chose to install the Aura Lunaria LED panel from Aura Light, coupled with Helvar ActiveAhead wireless lighting controls, in their offices, corridors and other open spaces.

## SALE Käikälä store

SALE stores are part of S-Group in the Finnish retail and service sector. The store is equipped with ActiveAhead luminaires from Purso's SNEP® range. A key requirement for the project was energy-efficient lighting which can be tuned flexibly to offer a comfortable experience to store users and staff. "We chose the Helvar ActiveAhead solution for this location because it is clearly one of the best solutions on the market. It is flexible, easy to use, easy to deploy and scalable for future needs. Energy savings is one of the most apparent benefits of this system."

EERO KUOPPA, Product Manager, Purso

## SLO Logistics centre office

SLO is a market leader in the B2B distribution of electrical products and solutions in Finland. The company recently completed an extension to their logistics centre located in Vantaa. The office space has been designed with users in mind.

When the lighting was designed, the requirements included high-quality adaptable lighting with energy-saving lighting controls. Ensto's SmartWay modular luminaires installed with a self-learning ActiveAhead control system have been used in the implementation to bring energy and cost savings, and true lighting benefits for the SLO's building.



Hansakorttelit Finland.  
Since installing Helvar's ActiveAhead lighting control system in the shopping center's public sections, the general lighting for the staff parking as well as the maintenance and logistics areas has also been reworked.

## Hansakorttelit

Hansakortteli is the largest and oldest shopping center in the city of Turku. Following extensive renovations that began in 2016, its various spaces have been illuminated by the result of a concerted effort between providers of smart technology and traditional lighting expertise.

With ActiveAhead, renovating the lighting system in this large shopping centre was a fast and easy project, according to the electrical installer. Combined with Helvar Insights, the premises can now deliver intelligent insights about energy- and system health, ultimately saving both time and money.

"The new lighting solution has been superb. We have found this intelligent system to work really well for us."

**JANNE SUOMINEN**, Property Manager for Hansakortteli,

## Unipro production and warehouse facility

Finnish lighting track manufacturer, Unipro opened a modern production and warehouse facility. They required an intelligent lighting system for the whole building, which can be flexibly modified to accommodate their needs today and in the future.

"We were looking for a partner with whom we could add value to our lighting tracks. We found an excellent match with Helvar's ActiveAhead wireless solution and the new DALI track sensors. It was an essential requirement to use DALI lighting tracks for simpler installation and mounting and to achieve energy savings by having the lights dimmed lower and off where no presence is detected. We've been delighted with the ActiveAhead solution and Node Advanced. Experiencing the solution ourselves on our premises gives us the confidence to promote it to our customers."

**VESA SAMELA**, CEO of Unipro

## Ramboll Headquarters

Ramboll, a leading engineering, design and consultancy company, wanted to build a truly modern data-driven headquarters. Wireless, self-learning and future-proof lighting control solution ActiveAhead was selected to cover the office floors as well as the parking garage with a total of around 3000 ActiveAhead luminaires installed. Helvar Imagine Router, and Helvar Insights - a scalable cloud-based suite of digital services - made the entire site a perfect example of a hybrid wired and wireless solution.

## Wärtsilä Campus

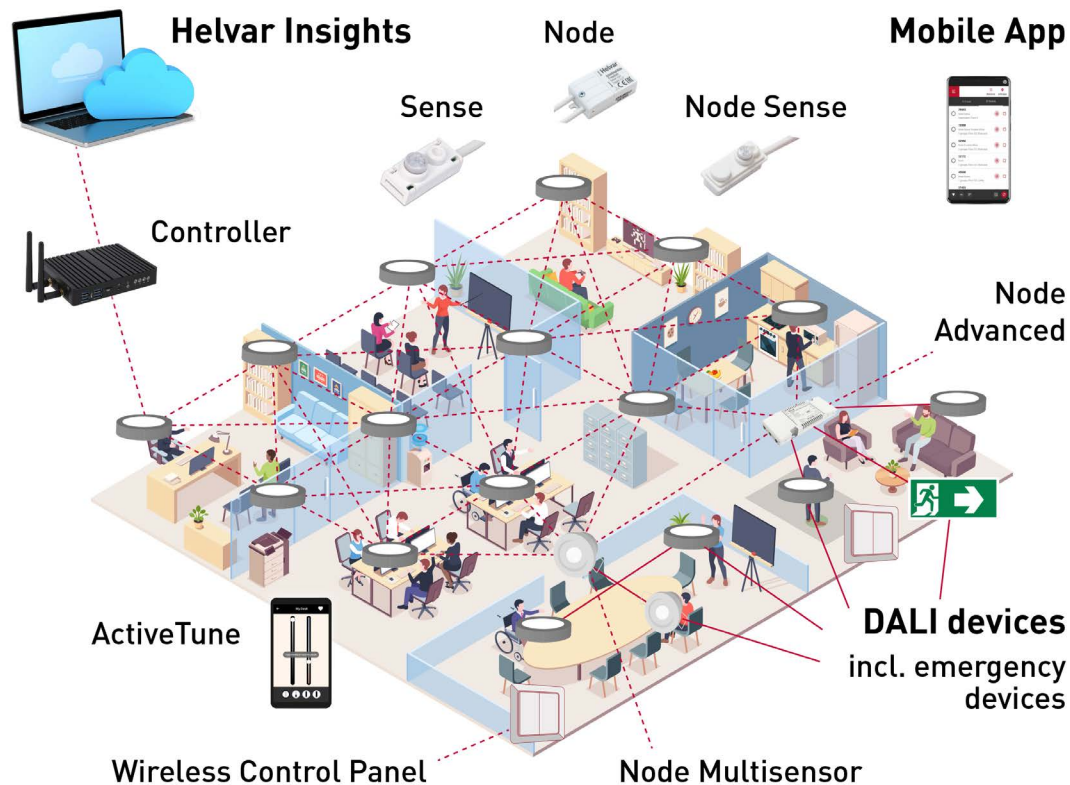
The Wärtsilä Helsinki Campus is equipped with the world's first artificial intelligence-based lighting control system, Helvar ActiveAhead. The facilities have been awarded the BREEAM rating. A key aim was to save energy and support wellbeing and productivity.

## YIT Headquarters

YIT, one of the largest North European construction companies, chose ActiveAhead when its headquarters was renovated. The two interlinked buildings were renovated in 2018 and 2019 with over a thousand ActiveAhead devices per building.



# ACTIVEAHEAD SOLUTION



Helvar ActiveAhead can be built flexibly using selected wireless ActiveAhead luminaires and independent ActiveAhead Nodes as per the project needs and requirements.

**Wireless ActiveAhead luminaires** include an ActiveAhead Node and thus do not need control cabling at all offering ultimate efficiency in installation.

**Independent ActiveAhead Nodes** take advantage of the wide range of DALI luminaires and devices while limiting the control cabling installation to a minimum.

A luminaire manufacturer chooses suitable products for ActiveAhead luminaires based on the application and aesthetic requirements. When ActiveAhead luminaires include a sensor they can self-learn from their surroundings enabling out-of-the-box functionality, automatic continuous adaptation to the space layout and utilisation changes as well as more detailed occupancy data for insights.

Independent ActiveAhead Nodes address the connected DALI devices offering power over the individual light output levels of the connected luminaires. This becomes handy for example when having different types of luminaires in the space calling for different levels as well as when using lighting scenes with a wall panel. The independent ActiveAhead Nodes support otherwise the same set of

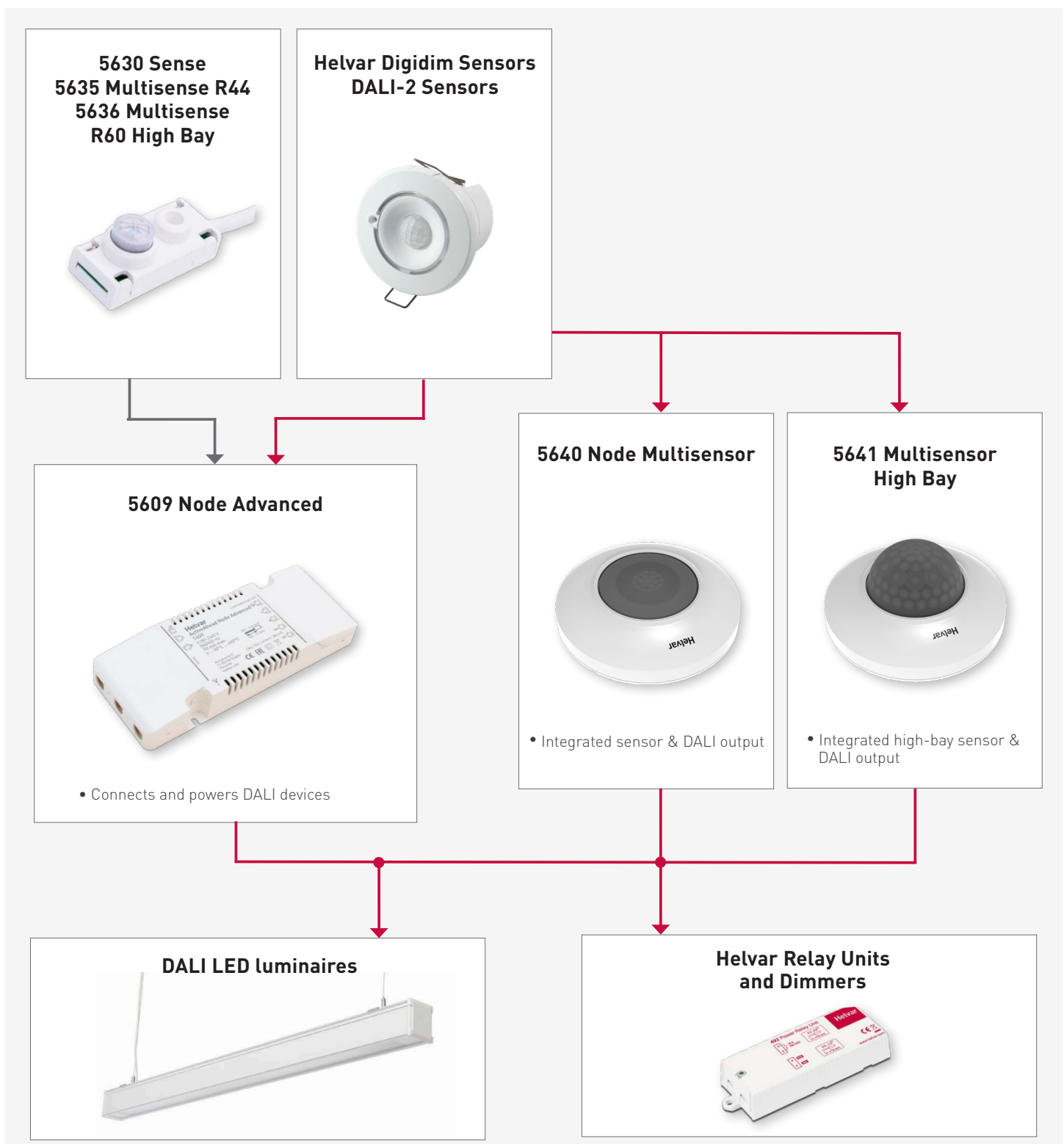
features as the Nodes used inside wireless luminaires allowing grouping, corridor hold, daylight harvesting, etc. to be used.

An ActiveAhead installation can be extended with new products and features at any stage in its lifetime. Connecting to Helvar Insights digital services is an example of such. In that case, ActiveAhead Controller is added and that connects the nearby ActiveAhead Nodes to the Helvar Insights platform enabling selected services to be used. A bigger site has multiple Controllers and there may also be parts done with the Helvar Imagine wired lighting control solution, in which case all these areas show up in the Helvar Insights service.



# CHOOSING PRODUCTS WITH **INDEPENDENT NODES**

With independent ActiveAhead Nodes, you are free to choose standard DALI luminaires for your installation. Add necessary sensors and wall panels as required and you are good to go. The system starts to work out-of-the-box and finetuning is done using the mobile app.



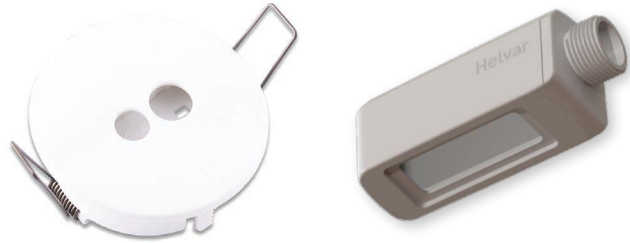
## OPTIONAL - Wall Panel

### 185W Wireless Control Panel



With no wires or cables, the self-powered panel sticks straight to the wall and is ideal for meeting room use. It speaks to ActiveAhead Nodes so you can choose four lighting scenes.

## OPTIONAL - Sensor Holders and Backboxes



There is a selection of different kind of [sensor holders](#) available for the ActiveAhead sensors offering more ways to mount the sensors. See the products at the Helvar website.

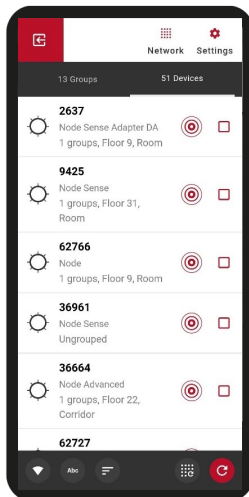
[Helvar ActiveHeat Thermostat 5680](#) is a smart and easy-to-use energy saving thermostat..

## Helvar ActiveAhead App

Download the ActiveAhead app to configure your ActiveAhead setup from your device.



ActiveAhead

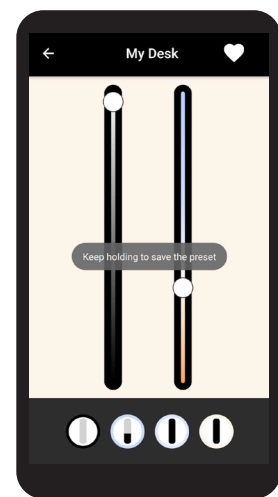


## Helvar ActiveTune™

With Helvar ActiveTune users can tune the light settings at their desk using their mobile phone.

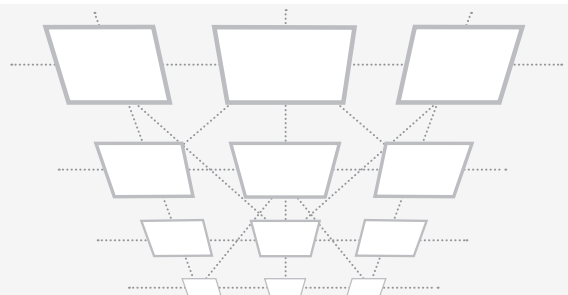


ActiveTune



## Bluetooth Mesh Network

Nodes connect through a Bluetooth Mesh network, a protocol based upon Bluetooth Low Energy that allows for many-to-many communication over Bluetooth radio, meaning devices can quickly transfer information between each other.

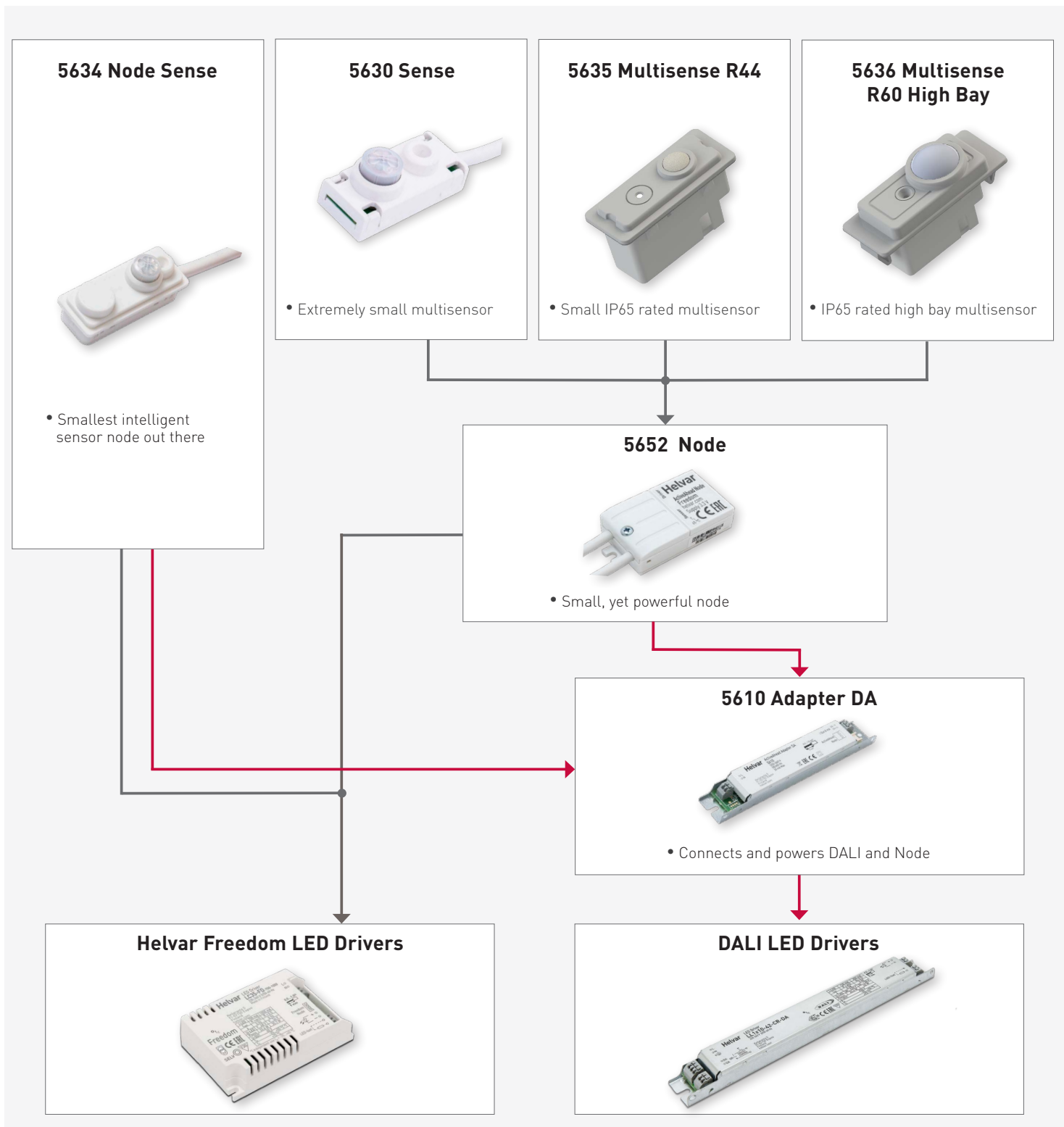


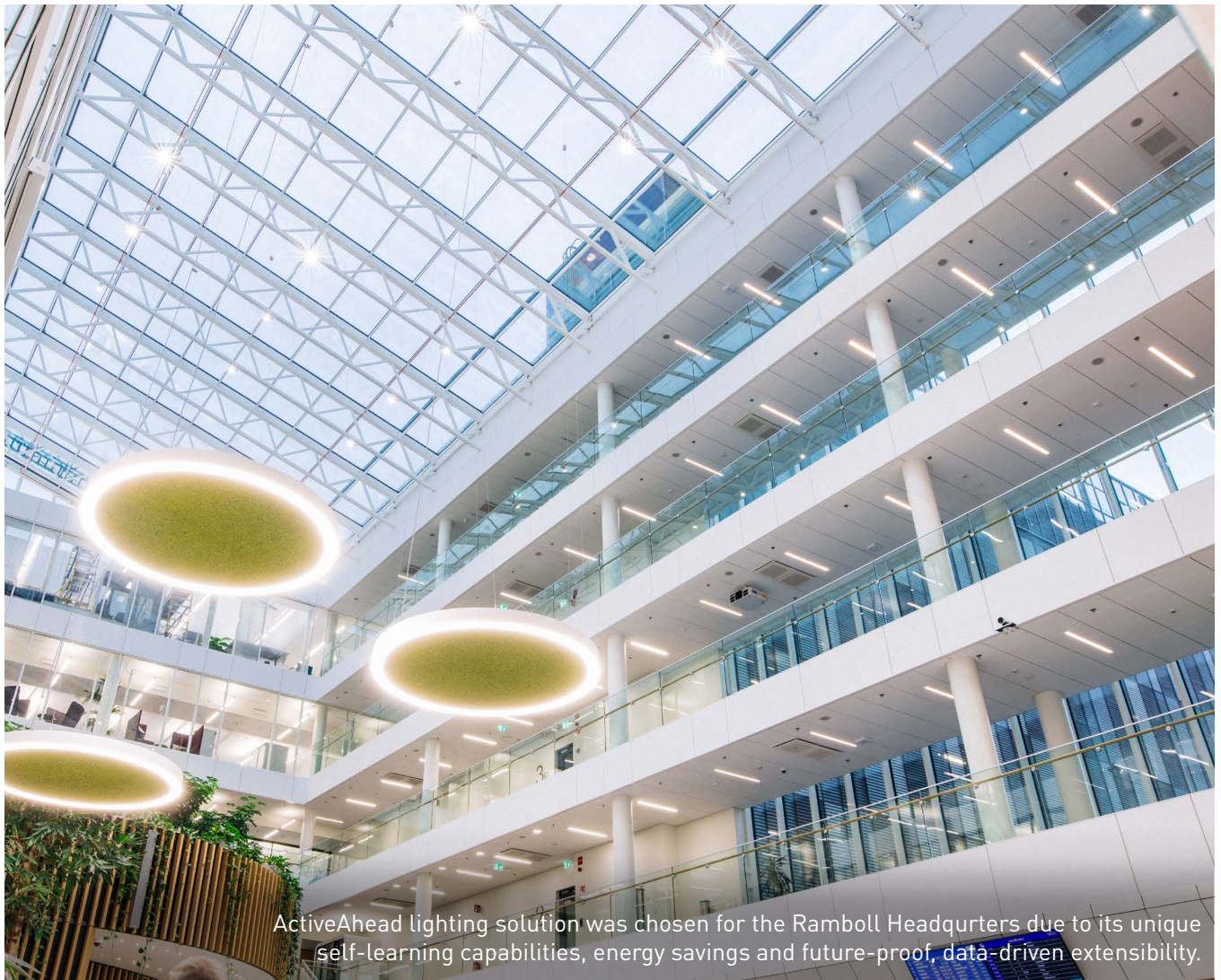


# CHOOSING PRODUCTS FOR **ACTIVEAHEAD LUMINAIRES**

ActiveAhead luminaires offer ultimate efficiency in installation. Freedom LED drivers are optimised for wireless while the Adapter DA extends the support to standard DALI LED drivers. The ActiveAhead Node Sense includes a multi-sensor, radio and processor all in a very small size and the ActiveAhead Node offers flexibility with or without a sensor.

Test ActiveAhead luminaires at the end of production line using the [ActiveAhead Tester App](#).





ActiveAhead lighting solution was chosen for the Ramboll Headquarters due to its unique self-learning capabilities, energy savings and future-proof, data-driven extensibility.



One thing I like about this ActiveAhead control is that it is based on Bluetooth mesh, so it's an open system that could be included with several other systems and controls using the same mesh network.

ERKKI HAKANEN - Project Director, Ramboll



We're based in Finland, Sweden and the UK - but we work with Partners all over the world.

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