

# Helvar Hybrid Lighting Control Overview Guide

**Helvar**





# Empowering Design

THE BEST OF BOTH TOGETHER

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ACTIVEAHEAD

IMAGINE

Unlock full design flexibility and  
future possibilities with the best of  
wireless and wired worlds, together.

# CONTINUING OUR HYBRID JOURNEY

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As the world of lighting design and technology continues to advance, embracing hybrid solutions has become more than just a choice; it's a necessity to meet the demands of today's dynamic lighting environments.

The trends in lighting control are steering us towards a future where wired and wireless lighting solutions converge seamlessly, offering an unprecedented level of control and creativity.

The spaces that we use today are no longer static

entities but dynamic ecosystems that demand adaptable, efficient, and intelligent lighting solutions.

**Node Link** is a bridge between our wired lighting control solution, Helvar Imagine, and our wireless innovation, Helvar ActiveAhead.

This next step in our hybrid journey, enables us to achieve adaptability, flexibility and scalability beyond limits.

Here at Helvar, we bring you the best of both, empowering design to create truly Brighter Spaces.





# BENEFITS FOR DESIGNERS, CONSULTANTS & SPECIFIERS

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Specifying the full Helvar portfolio ensures buildings meet their purpose, adapting and evolving to emerging technologies and requirements throughout their lifespan.



Extending an existing installation or renovating parts of a building is easy and fast with Helvar ActiveAhead.

When doing so, Helvar Node Link offers an advantage to utilise already existing integrations.



Empower lighting design by combining the strengths of Helvar Imagine and Helvar ActiveAhead. Create customised solutions tailored to your clients' needs and preferences, optimising lighting conditions for each space.



# BENEFITS FOR BUILDING OCCUPANTS & FACILITIES MANAGERS

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Opting for a single supplier, ensures compatibility and smooth integration between wired and wireless parts, reducing risks and complexities.



Being able to choose the most fit-for-purpose solution for each space offers the best lighting conditions and the most seamless user experience for the space users. This is proven to increase their wellbeing and performance as well as reduce sick days.



As requirements and needs change over time, hybrid solutions can be modified and expanded easily to accommodate new configurations, devices or functionalities.



# BENEFITS FOR BUILDING OWNERS & PROPERTY MANAGERS

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Being able to extend the lighting installation at any point in the building's lifetime with new devices, features, integrations and services, preserves the lighting installation value and, thus, the building's overall value.



Utilising the best of wired and wireless lighting solutions makes it easier to comply with the latest regulations, keeping the building prepared for the future.



A building which is fit for its purpose and easy to operate and maintain is more compelling to tenants and often warrants higher rental costs.

A building which is flexible and future-proof is also more sustainable and is better placed to achieve building certificates, such as LEED, BREEAM or WELL.



# THE NEXT STEP TO ACHIEVING SMART BUILDING CERTIFICATIONS

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Hybrid lighting control solutions play a pivotal role in helping stakeholders attain esteemed building certifications such as LEED, BREEAM, and WELL.

These certifications not only enhance a building's value but also streamline the tenant acquisition process by meeting the growing demand for sustainable, future-proof smart spaces. By seamlessly integrating the strengths

of both wired and wireless lighting solutions, a building can significantly improve its chances of earning these prestigious certificates while simultaneously providing superior lighting conditions for occupants.

This versatile approach to achieving the core lighting credits for LEED, BREEAM, and WELL certifications includes credits related to

energy efficiency, integration of energy-saving features, enhanced flexibility and adaptability of systems, and elevated occupant wellbeing through personalisation, colour temperature control, and dynamic lighting adjustment.

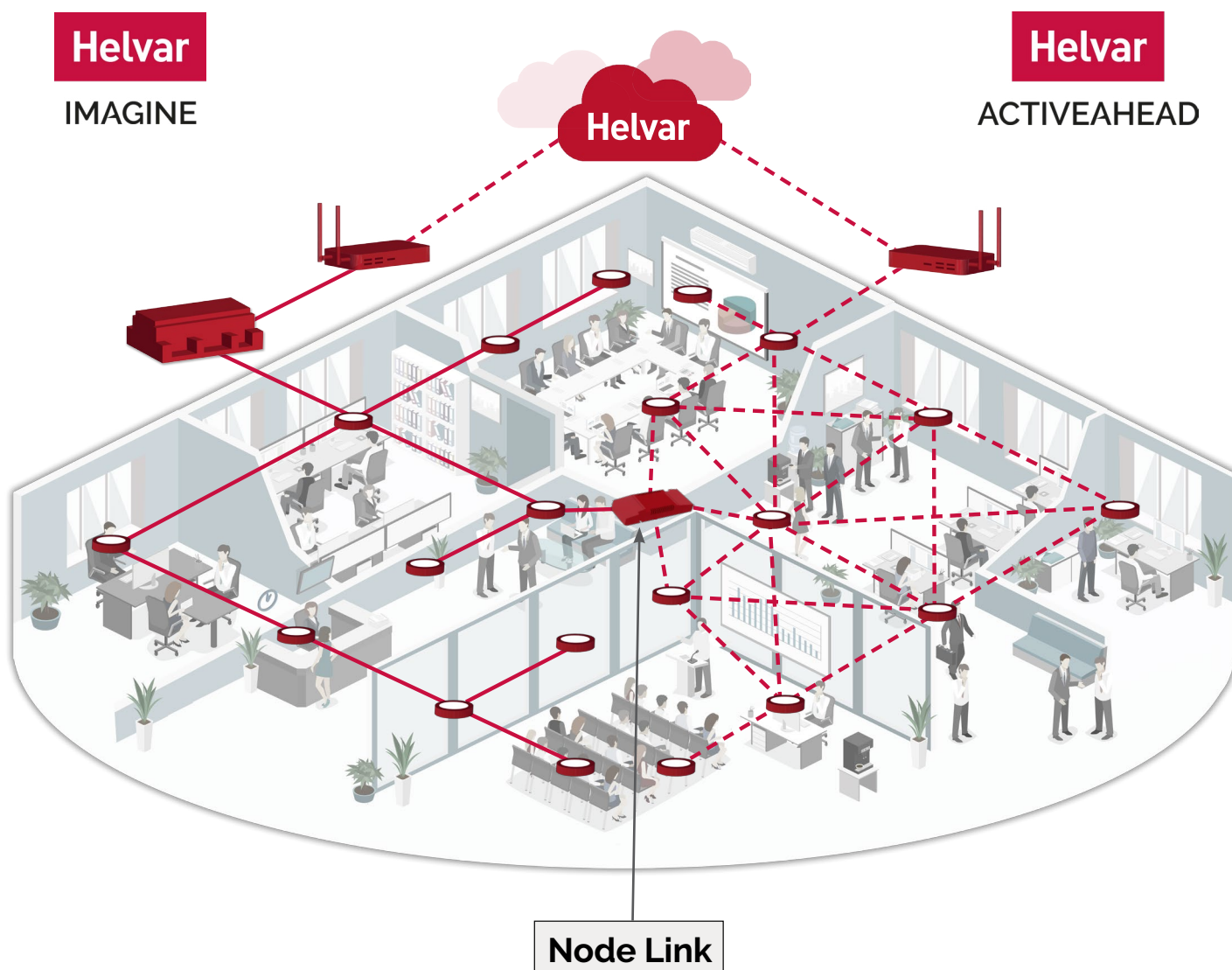
Learn about  
building certifications  
& lighting





# OUR SMART BUILDING ECOSYSTEM

Lighting is designed for the people using the space. A modern lighting design must also be sustainable, future-proof and comply with norms and legislation. Helvar lighting control offering makes it possible to achieve those and more in a flexible and easy manner.



**Helvar's Hybrid Lighting Control Solution** offers diverse possibilities and serves as an effective tool for future-proofing a building. By linking Helvar ActiveAhead parts of the installation to the Helvar Imagine solution, the user experience within the building can be seamless and unified. Linked ActiveAhead groups show up on the Imagine solution among the connected DALI devices, making it easy to work with both wired and wireless devices. Consequently, common lighting control logic can be used on both sides. In addition, this offers possibilities to utilize the building level integrations already existing on the wired Imagine solution side.



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## IMAGINE

### WIRED | DALI & DALI-2 LIGHTING CONTROLS



#### Support Wellbeing

Designed around people's wellbeing, it balances comfort and efficiency through user-orientated automation and interfaces.



#### Vastly Scalable

A complete DALI lighting control and management solution that offers true scalability from a single room to large campuses.



#### Future-proof

DALI-2 open standard offers efficient, futureproof connectivity with Helvar's added value and features on top of the standard.



#### Easy Integration

Easily integrate with other systems at a building or cloud level and gain complete control of a space remotely or on-site.

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## ACTIVEAHEAD

### WIRELESS | TRULY INTELLIGENT LIGHTING CONTROLS



#### Plug & Play

Helvar ActiveAhead can operate out-of-the-box without configuration and is incredibly easy to install and set-up.



#### Adaptable

Nodes learn from their surroundings and can automatically adjust their operations based on the actual usage of a space.



#### Scalable & Reliable

More devices can be added to an installation at any point in time while not needing to care about network limitations.



#### Energy Efficient

Intelligent self-learning algorithms utilise a wide range of sensors' data to maximise energy efficiency.

# HYBRID LIGHTING CONTROLS FOR EXISTING INSTALLATIONS

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In the context of existing installations, it is a common requirement to either upgrade specific zones or extend the installation into new areas. During these instances, it is crucial to ensure a seamless integration of the new areas with the existing infrastructure while maintaining ease of implementation. The wireless Helvar ActiveAhead solution often proves to be an ideal

choice for addressing the needs of these new areas.

The introduction of the Helvar Node Link system facilitates the connection of these new areas to the pre-existing Helvar Imagine solution, delivering a cohesive and uninterrupted user experience across the boundaries of these spaces. Furthermore, it enables the utilisation of

any pre-existing Building Management System (BMS) integrations to efficiently manage and control the ActiveAhead-enabled areas. Additionally, the Node Link system offers the capability to collect occupancy data from these areas and seamlessly transmit it to the BMS, further enhancing its functionality and efficiency in building management.





# HYBRID LIGHTING CONTROLS FOR RENOVATIONS AND RETROFITS

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During renovation projects, the ability to leverage the existing mains wiring for lighting upgrades can significantly streamline the process and reduce costs. In this context, the wireless Helvar ActiveAhead solution emerges as an exceptionally versatile and advantageous choice. It provides a range of flexible options, allowing for a seamless transition to modern lighting technology.

With ActiveAhead, it becomes possible to integrate wireless-ready luminaires or even connect standard DALI devices to the wireless mesh network, taking full advantage of the existing infrastructure. This adaptability ensures that the lighting upgrade can be tailored to meet specific requirements and accommodate various space types within the renovation project.

In certain instances, Helvar Imagine solution may be better suited to spaces with distinct requirements and preferences. The key benefit in renovations is the ability to avoid imposing a single technological choice across the entire installation. This flexibility is paramount, as it allows for a tailored approach that can address the unique needs of each area.



# HYBRID LIGHTING CONTROLS FOR NEW BUILDINGS

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In the context of new build projects, the ability to select the most suitable lighting solution for each space is paramount in ensuring optimal lighting conditions for occupants. There are situations where specific requirements remain unknown during the initial design and construction phases, especially when tenant identities are yet to be determined.

In such cases, Helvar Imagine may be chosen to control the public spaces of the building. These areas often require consistent and well-defined lighting standards.

Simultaneously, the wireless Helvar ActiveAhead solution can be effectively deployed in areas anticipated to be occupied by future tenants. ActiveAhead's adaptability

and ease of configuration make it a prime choice when tenant-specific requirements become apparent.

This flexibility allows for spaces to be quickly and flexibly adapted to the distinct needs of individual occupants, enhancing the overall versatility of the building and facilitating efficient rental arrangements.





# LIGHTING FUNCTIONS AND FEATURES WITH NODE LINK

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Control ActiveAhead and Imagine in same lighting groups



Control ActiveAhead and Imagine using same schedules



Control ActiveAhead and Imagine using same Light-over-Time profiles and schedules



Use corridor hold to keep lights on across Imagine and ActiveAhead systems



Control the whole building from building management system (BMS) via one integration point



Use occupancy data from ActiveAhead to control lighting on the Imagine lighting system



Offer occupancy data from the whole building to building management system (BMS) via one integration point



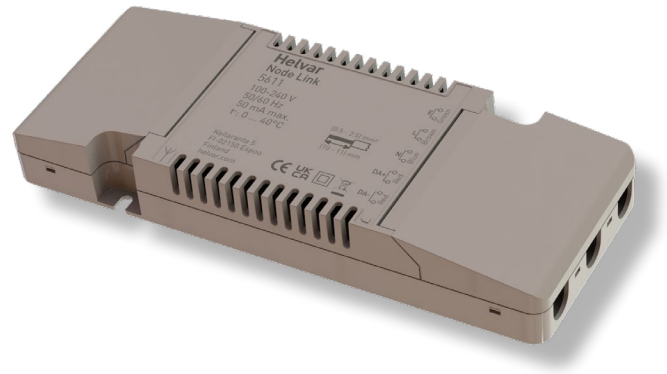
Use alarm function from Imagine to ActiveAhead during an alarm to keep ActiveAhead lighting on during the alarm

# TECHNICAL SOLUTION DETAILS

## 5611 Node Link

The Node Link offers a link between the truly intelligent wireless lighting solution Helvar ActiveAhead® and the wired DALI based lighting management system Helvar Imagine. The Node Link allows to choose which ActiveAhead groups are made visible on the Imagine system. Also, the whole nearby ActiveAhead mesh network can be linked on to the Imagine system.

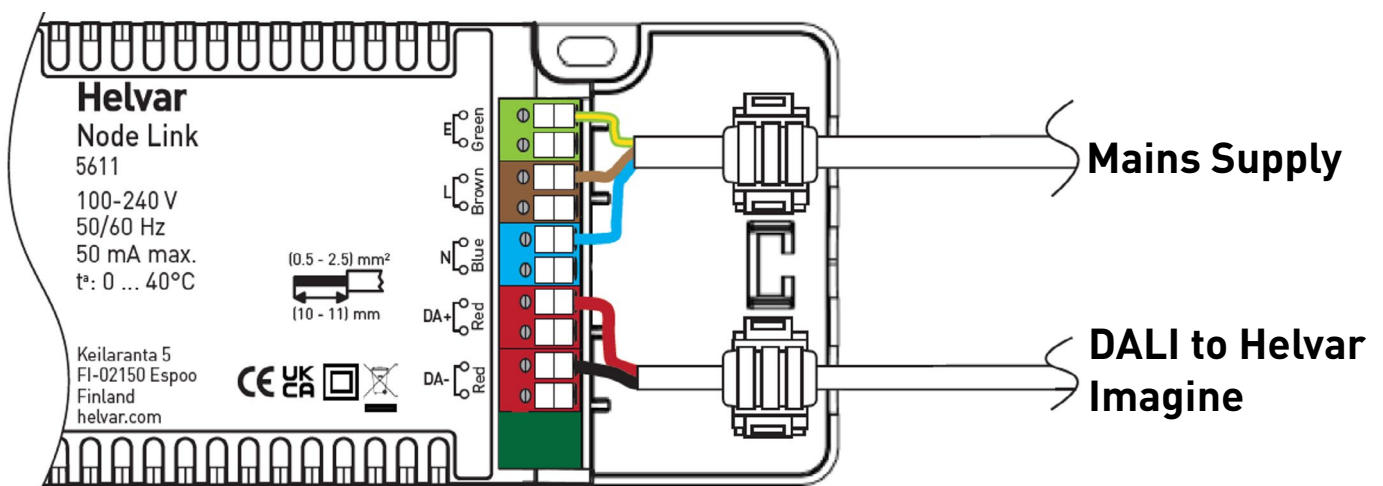
The solution optimises the communication between the systems and minimises the number of required DALI addresses on the Imagine system. No additional devices are needed to link the systems making the process simple to design, install and setup.



### Key Features

- Enables a hybrid lighting solution with ActiveAhead and Imagine solutions
- Get occupancy data from ActiveAhead to the Imagine solution
- Control ActiveAhead solution from the Imagine solution
- Easy to install and setup

### Wiring Diagram





## Links

- Link chosen ActiveAhead groups and/or link the whole ActiveAhead network to the Imagine solution as control and/or sensor links.
- Create up to seven links per link type.
- Each created link consumes only one DALI address on the Imagine solution minimising the usage of the valuable DALI addresses.

## Control Links

Created control links are shown as DALI-2 DT8 Colour control LED lamps on the Imagine solution from where they can be controlled similarly to other connected DALI control gear.

## Sensor Links

Created sensor links are shown as DALI-2 Occupancy Sensors on the Imagine 950 DALI-2 Multi-master Application Controller and provide occupancy data from the linked ActiveAhead groups and/or network.

## DALI and Wireless Considerations

- DALI power consumption of Node Link is 2 mA despite the number of created links.
- Max. distance to closest ActiveAhead Node is 10 m.
- Max. distance to furthest linked ActiveAhead Node on the mesh network is 30 m.

## Integrations

When installation is connected to Helvar Insights services, Imagine side is connected using Helvar Cloud Gateway(s) and ActiveAhead side using ActiveAhead Controller(s).

When the Imagine system is connected to a building management system, the linked ActiveAhead points offer occupancy data and can be controlled via the integration.

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## Ready to unlock the benefits of hybrid in your projects?

Whether you have an upcoming project or you just want to learn more, our team of experts is here to help.

Get in touch at [helvar.com/chat](https://helvar.com/chat)

“ Helvar’s Hybrid Lighting Solution marks a lighting industry paradigm shift, seamlessly merging the wireless simplicity of Helvar ActiveAhead with the scalability of wired Helvar Imagine solutions. This integration not only unlocks limitless design possibilities but also ensures technology evolves with our ever-changing needs. ”

**MATTI VESTERINEN, DIRECTOR OF WIRELESS - HELVAR**

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

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