



Is your lighting control solution  
future-proof?

Five aspects of DALI you  
need to know

**niko**



# Are you curious about the many benefits of DALI-2 lighting control?

The demands on lighting control have increased. It is no longer enough to install lighting with an on/off function. These days, your customers expect user-friendly, convenient and energy-saving lighting control. In addition, building legislation sets out requirements.

Fortunately, installing intelligent and future-proof lighting controls that meet customer expectations, legislative requirements and current recommendations does not have to be difficult or time-consuming.

With DALI-2 lighting control, you as a consultant or installer can provide your customers with user comfort, while giving you more freedom during your design and installation process.

When you choose a DALI solution, you get simple installation and zoning capabilities, giving your customers more control over their lighting control for optimal user comfort in the room.

At the same time, you can look forward to faster and more efficient installation than you would using more traditional lighting systems.

Read on for more information on five aspects of DALI and DALI-2 that are important for you to know.

Happy reading!





# Table of contents

Are you curious about the many benefits of DALI-2 lighting control? .....	2
Table of contents .....	3
DALI-2 provides digital lighting control DALI-1 and DALI 2 .....	4
Get more freedom with DALI-2 .....	5
Easy customisation makes DALI-2 a future-proof solution .....	6
Simple installation and minimised risk of miswiring with DALI-2 .....	7
DALI-2 provides full flexibility in any room .....	8
Find out more about DALI-2 in collaboration with Niko .....	9

# DALI-2 provides digital lighting control DALI-1 and DALI 2

Great progress has been made in lighting control systems in recent years.

One of the reasons is that there has been more focus on the importance of optimal lighting levels. Not only does lighting play an important role in user comfort, but it is also an important parameter for energy optimisation – because luminaires that are unnecessarily switched on use unnecessary energy!

Automatic and intelligent lighting control makes it easier to ensure an optimal lighting level. As a result, simply turning lighting on and off with the flick of a switch is almost a thing of the past.

Want to continue providing your customers with the most optimal lighting installation? Well, then it's time to look at digital lighting control.

Here, DALI is the leading international standardised protocol.

DALI stands for Digital Addressable Lighting Interface and gives you control over a complete lighting control system by ensuring that different lighting control devices and luminaires can communicate with each other.

All DALI-2 equipment must be tested and certified by the DALI Alliance before manufacturers are allowed to use the DALI-2 logo.

So if you see the DALI-2 logo, you can be sure that the equipment you choose to install can be used together.





# Get more freedom with DALI-2

DALI-2 not only meets your customers' lighting needs – it also gives you much more freedom in your installation.

When the DALI protocol first came out in the late 90s, the focus was only on standardising drivers and relays, but with DALI-2 you also get integration of control devices such as buttons and detectors.

This opens up new possibilities in control equipment – some notable measures include defaults for LED controllers, colour management, dimmers, relay modules, and fire and emergency lighting, giving you much greater flexibility and choice in your installation

By combining certified actuators and controllers – regardless of manufacturer – you get much more flexibility and choice in finding the optimal lighting control solution for all your projects.

Since the DALI-2 system is not patented, DALI-2 is compatible with components and luminaires from other manufacturers. This results in a large international market offering, which provides one of the major benefits of using DALI-2 lighting control, namely interoperability.

When you choose DALI-2, you also choose a solution that meets the needs of everyone involved – from yourself all the way to the end user



## **A strong and complete sensor range that meets all your requirements**

All DALI detectors in Niko's new P40 and M40 sensor series are DALI-2 certified to give you the greatest possible freedom and flexibility.

With the sensor's many integrated features, you get even more benefits.

You get easy connectivity for up to ten secondary devices and a cost-effective alternative to complex BMS solutions. Bluetooth® switches provide wireless user control that, in combination with a wireless Master-Master connection, ensures optimal lighting control and user comfort for your end users.

With the P40 and M40 detector series, you can leave tools lying around and save time on assembly. The smart SnapFit mount allows you to install the detector with a single twist-and-click motion.

# Easy customisation makes DALI-2 a future-proof solution

## Technology is evolving at a rapid pace

This means that new opportunities are constantly emerging. This also means that the smart lighting control solutions of today will not necessarily be the best in the future.

You do not have to worry about this headache with DALI-2.

One of the major benefits of DALI-2 lighting control is that you can simply customise the system after installation.

If needs change in the future – or if there are new requirements that the lighting control system must be able to meet – you can simply adapt the system through programming, for example in the Niko detector tool app.

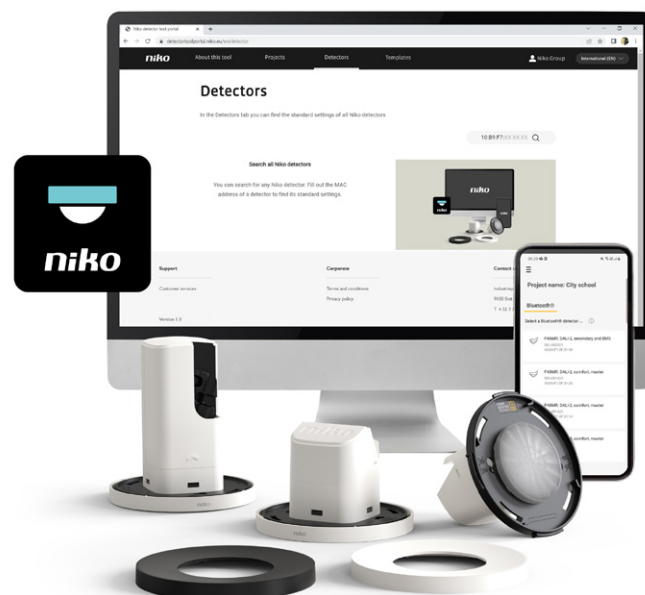
This makes it much easier for you to create additions, make changes and improve the lighting control system in the future, as you do not need to deal with wiring or power, as you would with more traditional lighting installations.

## Lighting control solutions for any building

At Niko, we provide lighting control and daylight management solutions for all types of buildings.

And with our product range, we combine elegant and functional design with fast and user-friendly installation – so you can get the optimal solution, whatever your project requirements.

Get a non-binding presentation of our range.







# Simple installation and minimised risk of miswiring with DALI-2

When you choose a DALI-2 lighting control system, you can look forward to an easy installation process.

DALI-2 provides simple wiring with fewer wires than traditional lighting systems. This means you can complete the installation faster and more simply – and at a much lower cost.

DALI-2 uses a two-wire bus for communication with the supply and DALI-2 bus in the same cable. At the same time, DALI-2 has an almost free topology, which means you are not tied to a fixed wiring pattern. In addition, DALI only uses a five-wire cable (however, there are no requirements for cable type), and the control circuit has a maximum cable length of 300 meters, and the maximum voltage drop is 2V.

Superior and subordinate detectors communicate via the DALI bus.

Usually polarity does not matter, as the digital signals are sent without polarity. This also minimises the risk of miswiring.

## Quality consciousness at the tip of your fingers

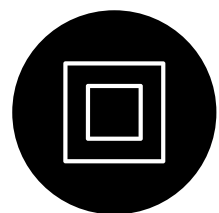
At Niko, we always strive to deliver the highest quality to our customers.

We therefore work constantly to improve our products and solutions so that we can continue to offer our customers the best in function, design and innovation.

This is because we know that the only thing that never goes out of fashion is quality.

To maintain this high level of quality, we have an extensive quality control system to ensure that our solutions can withstand daily use.

However, in the unlikely event that your Niko products do not function, we offer a four-year warranty on all Niko hardware.



# DALI-2 provides full flexibility in any room

DALI is the obvious choice for intelligent lighting control.

Because with DALI you can offer your customers a reliable and safe solution that can be simply adapted to their needs and rooms with quick zoning.

Selecting DALI-2 allows you to connect controllers and 64 input devices to the DALI bus.

Moreover, you do not need more than a single DALI bus – even with multiple zones.

You can also create an integration with additional lighting, such as panel lighting, ON/OFF or dimming. In addition, you can create multiple groupings with DALI lighting control, allowing your customer to control the lighting in the room, adjacent rooms or in the corridor.

With DALI-2 lighting control, it is possible to adjust both the level and the colour of the light in the individual rooms, giving your customers complete control over their lighting.

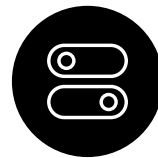
In short, DALI gives you complete freedom of installation and your customers complete control over their lighting.



Unsurpassed daylight control



Four daylight zones with individual control



Simple lighting control of neighbouring zones



Folding wall solution



Multizone for e.g. blackboard lighting



Day/Night function





# Find out more about DALI-2 in collaboration with Niko

At Niko, we want to make intelligent lighting control easy.

We therefore strive to provide the best help based on our many years of experience in lighting control. For you, it means a partner who can support you – before, during and after your project.

Our experience is broad, and we offer both advice and assistance in the preparation of project proposals.

And, of course, we are ready during installation, configuration and commissioning should you need technical support.



Niko develops electr(on)ic solutions to improve buildings so that they can better meet the needs of the people who live and work in them: by minimising energy consumption, by improving lighting comfort and safety, and by ensuring that all applications work seamlessly together. Buildings with Niko solutions are more efficient, can be controlled remotely and can be integrated into larger ecosystems.

Niko is a Belgian family-owned company in Sint-Niklaas with 700 employees and 10 European branches.

At Niko, we ask ourselves every day: "How can we improve buildings to better meet your needs?"

**Niko sa**

Industriepark West 40

B-9100 Sint-Niklaas

Belgium

[sales.be@niko.eu](mailto:sales.be@niko.eu)

+32 3 778 90 00

[www.niko.eu](http://www.niko.eu)

**niko**

PF-1592-11