



theben

Smart automation
Intelligently networked
KNX home and building automation



Building Automation since 1921



More comfort.
Greater efficiency. More
Theben KNX

Control buildings more intelligently with Theben and KNX

Room climate, lighting, blinds, heating, and ventilation: with KNX from Theben, all functions can be controlled flexibly, efficiently, and conveniently.

Thanks to open standards, the system is future-proof and can be expanded at any time. DALI gateways connect KNX with modern lighting control, while KNX Secure reliably protects sensitive data.

Since 1992, Theben has been actively involved in KNX development as a member of the Executive Committee and Technology Committee of the KNX Association. In 2019, Theben was the first manufacturer to launch KNX wireless actuators with KNX Data Secure.

Whether it's a new build or a modernization project – if you choose KNX, choose Theben.

- ✔ Comprehensive portfolio for wired (KNX-TP) and wireless (KNX-RF) solutions
- ✔ Design-oriented control and sensor elements
- ✔ DALI-2 certified gateways and actuators
- ✔ Over 80 products with KNX Data Secure and KNX IP Secure
- ✔ Presence and motion detectors for every installation situation
- ✔ Decades of experience in switching and dimming LEDs

DALI-2 Room Solution Complete. Open As simple as broadcasting

How would you like to implement customized, DALI 2-based lighting controls with HCL functionality, RGBW lighting, and time-controlled functions as easily as with broadcast detectors? What if DALI-2 components from third-party manufacturers could also be integrated without any problems? What if programming could be done conveniently via an app?

Welcome to the DALI-2 Room Solution from Theben. This complete solution for individual rooms includes all necessary DALI-2 core components such as presence detectors and sensors, push-button interfaces, and actuators.



#01 Complete

Comprehensive solution comprising presence detectors, presence sensors, pushbutton interfaces, and switching actuators.

#02 Open

Investment security thanks to open DALI-2 system.

#03 Versatile

HCL functionality, RGBW light, and time-controlled functions.

#04 Comfortable

Commissioning and control via DALI-2 RS Plug app. Available for iOS and Android or Windows. Download via www.theben.de/dali2



Download for iPad
iOS version



Download for tablet
Android version

#05 Intuitive

Easy commissioning – individual addressing as simple as broadcast.

You can find detailed information on the DALI-2 Room Solution in our new brochure or on our website.

www.theben.de/dali-2-bro-en



The perfect pair for lighting control: presence detectors and DALI-2

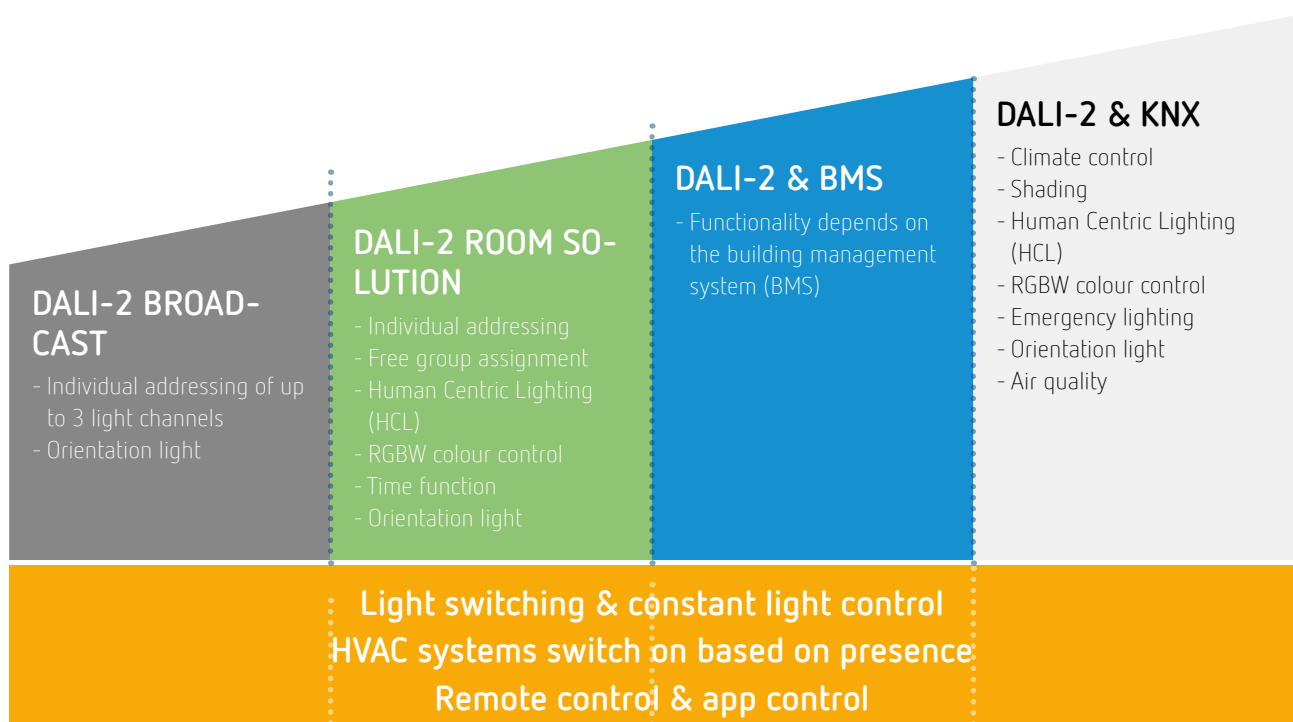
Theben offers a wide range of DALI-2 presence detectors and presence sensors for almost every requirement. DALI-2 broadcast presence detectors enable high-quality standard solutions with simple commissioning, a lighting group with constant light control, and orientation lighting. In addition, an external DALI-2 relay can be easily integrated, for example for HVAC applications.

Addressable DALI-2 presence detectors allow flexible assignment of up to three lighting groups on a DALI line with constant light control and orientation lighting. The devices offer 2- or 3-channel mixed light measurement. In addition, the buttons can be conveniently assigned to individual lighting groups using a remote control.

With the DALI-2 Room Solution, you can implement individual, DALI-2-based lighting controls with HCL functionality, RGBW light and time-controlled functions. And it's as easy as using broadcast alarms. All DALI-2 presence sensors can also be integrated into the DALI-2 Room Solution.

Theben DALI-2 presence sensors can be operated with any Multimaster Application Controller that complies with IEC 62386 parts 101/104. This allows you to connect your DALI-2 lighting management system to the higher-level control system of a building management system (BMS).

A wide range of KNX/DALI gateways provides a bridge to the KNX world and thus additional functionality such as shading and climate control.



Custom lighting concepts Versatile applications For every need

The DALI-2 Room Solution demonstrates its advantages wherever customized lighting concepts need to be designed. The integrated timer allows for extremely flexible response to every application and greater energy savings. In addition, the optional HCL function can maintain or even improve people's health, well-being, concentration, and performance. This means that not only electrical planners and installers gain added flexibility, openness, and convenience in lighting control. Users themselves also benefit from customized feel-good lighting.

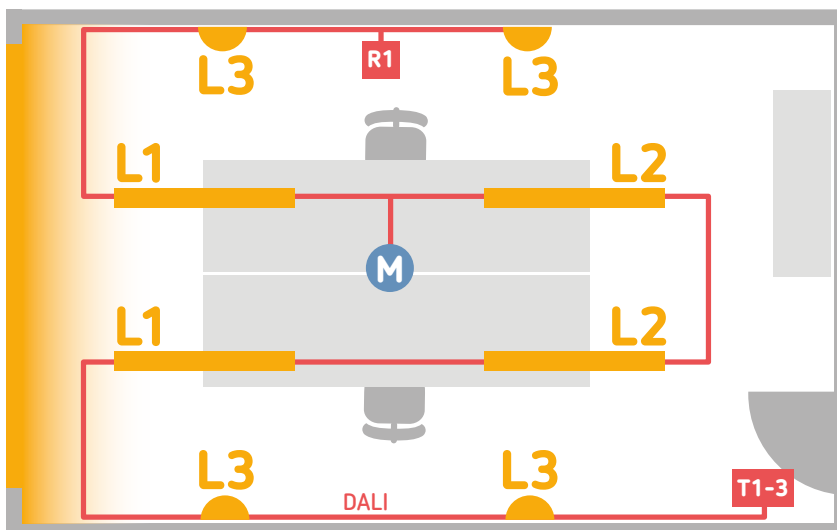


Find out more at
www.youtube.de/thethebenag



Work more productively and with greater satisfaction – in offices and meeting rooms

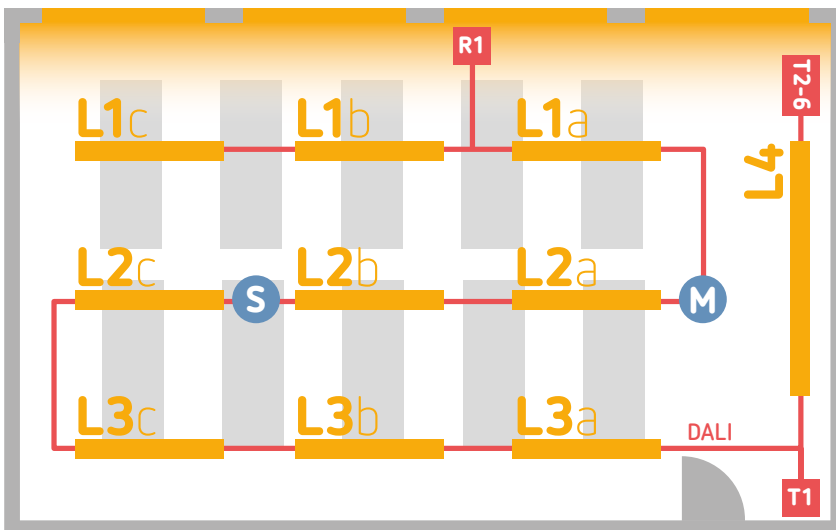
Use the HCL function of the DALI-2 Room Solution in individual offices, open-plan offices, and meeting rooms to imitate the course of daylight and RGBW light for creative colour design. Create customized lighting scenes for greater concentration or relaxation. And program time-controlled functions to reduce energy consumption, for example, through orientation lighting and setpoint reduction. This will help you create a pleasant working environment and increase employee productivity and satisfaction.



- **Light groups 1 and 2** with HCL function "Daylight progression office"
- **Optional lighting group 3**
Wall washer with HCL function "Daylight progression office" or decorative RGBW lighting
- **Buttons for lighting groups 1 and 2:**
 - Button 1 on/off and dimming
 - Button 2 Scene "Concentration"
 - Button 3 Scene "Relaxed"
 - Button 4 "Automatic daylight control"
 - Optional separate button for light group 3, RGBW colour setting
- **Presence group 1**
with DALI-2 relay (R1) for HVAC control

More focused teaching and learning – in classrooms and lecture halls

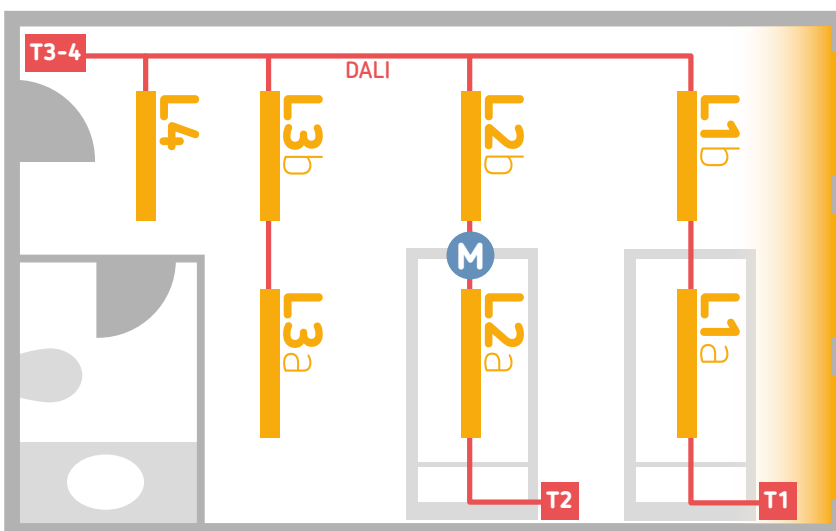
In lecture halls, classrooms, and seminar rooms, use the HCL function and multiple lighting groups to adapt the lighting to different learning situations. Design customized lighting scenes for class tests, lectures, and group work, for example. And control the lighting for the board via constant light control or push buttons. This allows teachers and students to concentrate optimally and teach and learn in a relaxed atmosphere.



- Light groups 1, 2, and 3 with HCL function "Daylight progression school"
- Buttons for lighting groups 1, 2, and 3
 - Button 1 on/off and dimming
 - Button 2 Scene "Concentration"
 - Button 3 Scene "Relaxed"
 - Button 4 "Automatic daylight control"
 - Button 5 free scene "Presentation" (ECGs "a" 30%, ECGs "b" 50%, ECGs "c" 70%)
- Light group 4 Blackboard lighting with constant light control or switching mode, dimmable via push button 6
- Presence group 1 with DALI-2 relay for HVAC control

Promoting regeneration and increasing well-being – in nursing homes and hospitals

Biodynamic light has been proven to promote human well-being. In nursing homes and hospitals, use the HCL function as well as individual lighting scenes and RGBW colours to stimulate patient activity and relaxation through a natural daylight cycle. This reduces restlessness at night and ensures that the internal clock adjusts more quickly to the usual daily routine after anesthesia.



- Light groups 1, 2, and 3 with HCL function "Natural daylight progression"
- Light group 4 TW lighting entrance
- Buttons for lighting groups 1, 2, 3, and 4
 - Button 1: On/off and dimming of light group 1
 - Button 2: On/off and dimming of light group 2
 - Button 3: On/off and dimming of light groups 1, 2, 3 and 4
 - Button 4 on/off and dim light group 4
- Time switch function

Between 10:00 p.m. and 7:00 a.m., L1a & L2a are off, the remaining lights are set to orientation light 10%.



Flexible colour control in KNX building automation with KNX and DALI-2 Device Type 8

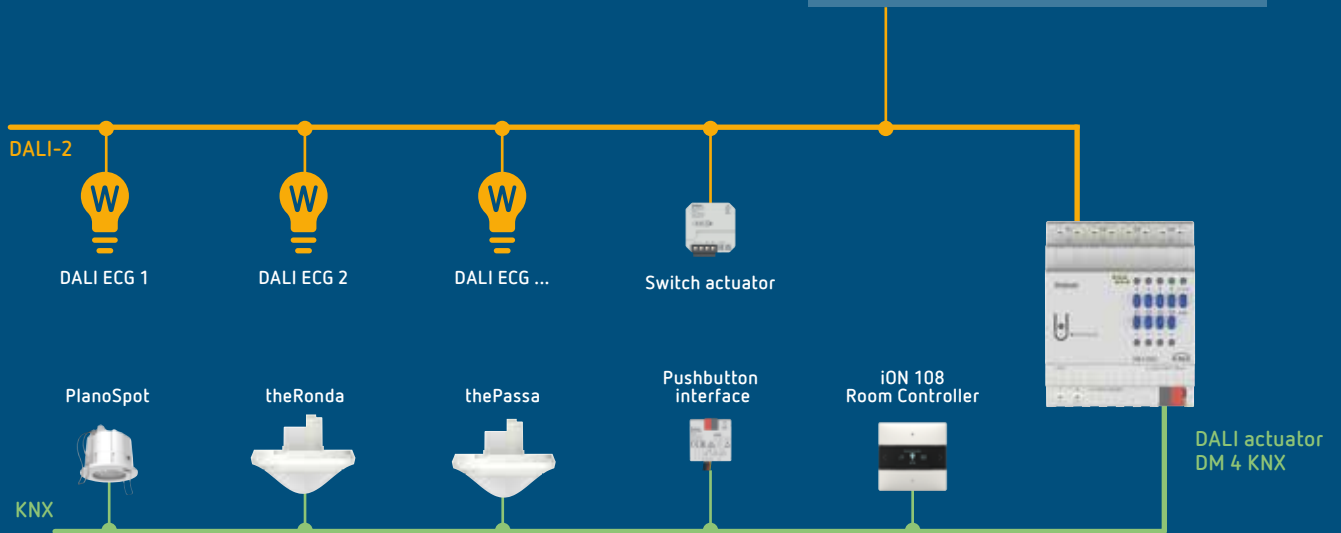
With the DALI-2 certified DM 4 DALI KNX actuator, up to 30 DALI control gear devices per channel can be easily controlled via broadcast commands. Broadcast communication does not require DALI addressing or grouping, greatly simplifying commissioning and maintenance.

The highlight: The 4-channel actuator also supports the control of colour and colour temperature of devices according to DALI Device Type 8 (DT8) in a KNX building automation system. Naturally optimally protected by KNX Data Secure.

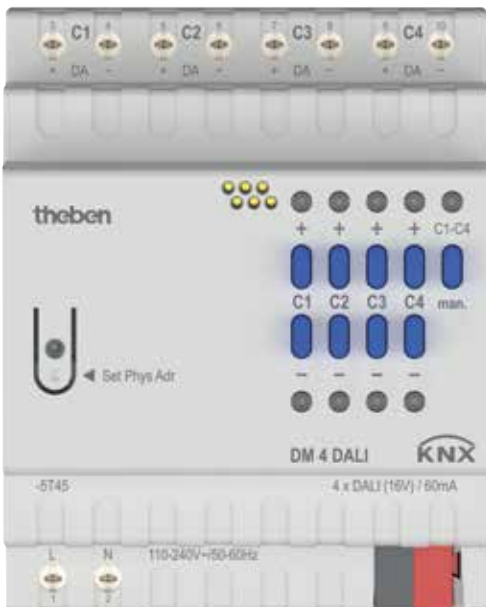
For example, the working atmosphere in offices and meeting rooms can be made more pleasant by using cooler or warmer light. In addition, creative accent lighting is possible, e.g., in hotels, lounges, exhibition rooms, or outdoor areas. And by using LED strips, you gain maximum flexibility in the colour and colour temperature design of individual lighting concepts.

IEC 62386

Part 201 (DT0) Fluorescent lamps
 Part 204 (DT3) Discharge lamps
 Part 205 (DT4) Incandescent and halogen lamps
 Part 206 (DT5) 1-10 V DC control devices
 Part 207 (DT6) LED modules
 Part 208 (DT7) Switching relay
 Part 209 (DT8) Colour control



System diagram: Broadcast control



Simply colourful: DALI broadcast actuator

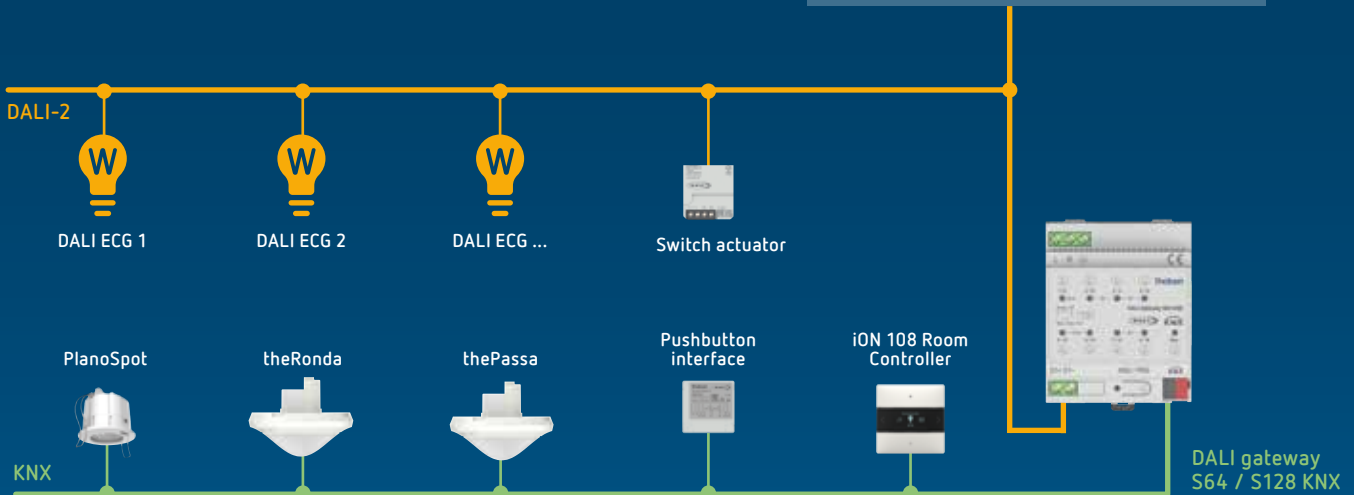
The DALI actuator DM 4 KNX is used to control electronic ballasts with a DALI interface via the KNX installation bus.

- Interface between the DALI system and the KNX bus
- DALI-2 certified
- 4 channels, broadcast communication
- Control of up to 30 DALI devices per channel
- Control of light colour and colour temperature in accordance with EN 62386-209 (DT-8)
- Easy commissioning and maintenance thanks to broadcast communication
- Easy replacement of ECGs in case of failure
- Easy commissioning and programming in the ETS, without additional tools or ETS app
- Secure communication through support of KNX Data Secure

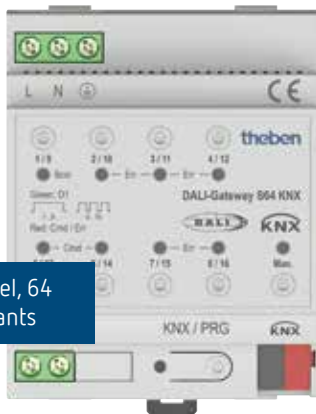


IEC 62386

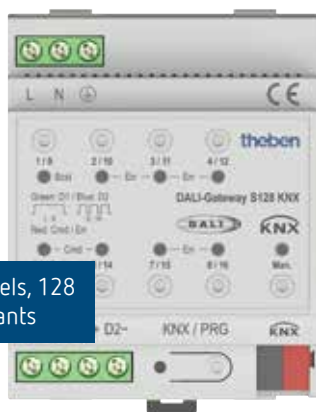
- Part 201 (DT0) Fluorescent lamps
- Part 204 (DT3) Discharge lamps
- Part 205 (DT4) Incandescent and halogen lamps
- Part 206 (DT5) 1-10V DC Control Units
- Part 207 (DT6) LED Modules
- Part 208 (DT7) Switching relay
- Part 209 (DT8) Colour control



System diagram: Single Master Application Controller



1 channel, 64 participants



2 channels, 128 participants

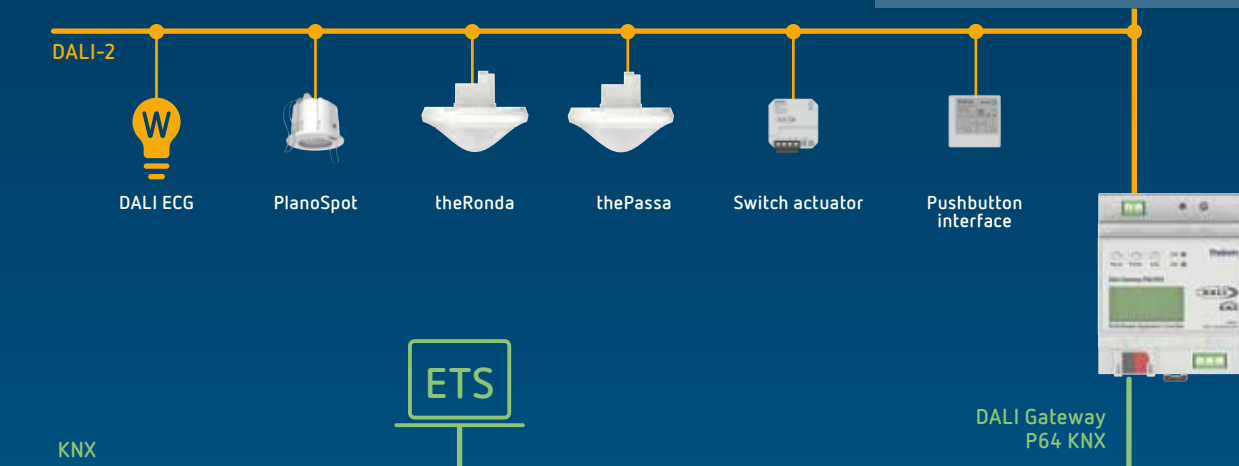
DALI Gateway S64 & S128 KNX Common functions:

- Single Master Application Controller
- 1 channel for 64 ECGs/2 channels for 2x 64 ECGs
- Individual control or in 16 groups
- Colour light control with Device Type 8 (DT8)
- Time-dependent colour control
- Scene module for 16 scenes
- Energy savings by switching off the ECG power supply in the groups (communication object)
- Easy replacement of ECGs in case of failure
- DALI commissioning via the free ETS app (DCA)

Automatically make more out of light DALI gateways

IEC 62386

Part 201 (DT0) Fluorescent lamps
Part 202 (DT1) Emergency lights with single battery
Part 204 (DT3) Discharge lamps
Part 205 (DT4) Incandescent and halogen lamps
Part 206 (DT5) 1-10V DC control units
Part 207 (DT6) LED modules
Part 208 (DT7) Switching relays
Part 209 (DT8) Colour control
Part 301 Push buttons
Part 302 Switches
Part 303 Motion detectors
Part 304 Brightness sensors



System diagram: Multi Master Application Controller



Connecting worlds: Multi-Master DALI Gateway P64 KNX

The DALI Gateway P64 KNX is a multi-master application controller for controlling electronic ballasts with a DALI interface via the KNX installation bus.

- Integration of 8 DALI-2 sensors (presence and brightness)
- 64 DALI participants in 16 groups or individually controlled
- Extended functionality of the motion detector with 2-point or constant light control
- Support for 8 DALI-2 push buttons and 8 generic input devices
- The GTIN of EVGs and input devices can be read out for easy identification.
- Support for energy reporting in accordance with DALI Part 252
- Integrated IoT interface: API/MQTT
- Control of light colour and colour temperature in groups or individually
- Adjusting the colour temperature to the dimming value
- Scene module for 16 scenes
- Time-dependent control of brightness, light colour and colour temperature
- Effect module for sequence controllers
- Support for single battery emergency lights and emergency lighting systems with central battery (EN 62386-202, DT-1)
- Commissioning via the controls on the device, via the integrated web server, or via the free ETS app (DCA)

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