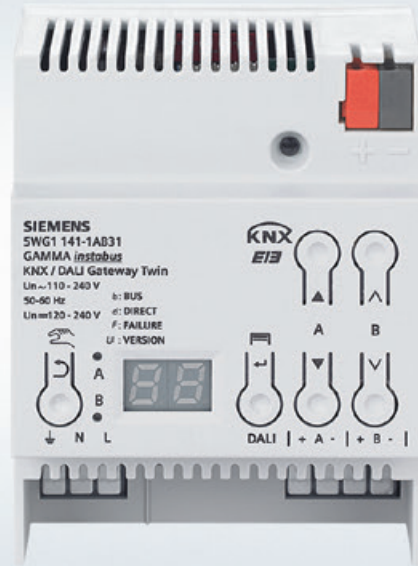


# SIEMENS



The worldwide standard for home and building control



## KNX/DALI Twin gateway – double benefit

The new dimension in lighting control – DALI actuators and DALI sensors at two DALI outputs

### More productive dual use

The compact KNX/DALI Twin gateway offers expanded usability with two DALI outputs that can be configured independently. Up to 128 DALI actuators can be controlled simultaneously by broadcasting, divided into 32 groups or integrated into 32 scenes. An integrated incorrect voltage detection system protects the DALI outputs against installation errors.

### Highly flexible installation

To increase the range of design options, selective DALI-capable sensors can be connected in addition to the 128 DALI actuators. Lighting control can be implemented flexibly using KNX-capable or DALI-capable sensors. To protect all DALI-relevant functions and keep them operational if the KNX communication fails, an optional standalone mode can be selected. This makes it possible to design DALI-only lighting systems.

### Comfortable configuration

The user-friendly ETS plug-in simplifies and speeds up the configuration and parameterization of all functions and DALI devices. The clearly organized tables can be customized. In addition, a convenient import function makes it possible to quickly and easily convert and import configuration data from other Siemens KNX/DALI gateways.

### Easy engineering and commissioning

The ETS apps\* make engineering much more efficient and configuration and commissioning easier and faster. The ETS apps achieve this by exchanging planning data as well as through batch operations when switching applications.

### Highlights

- Two independent DALI outputs increase efficiency
- DALI sensors make for extremely flexible installation
- Faster configuration using the optimized ETS plug-ins
- Faster KNX downloads thanks to an optimized process
- More efficient engineering and commissioning using add-on software

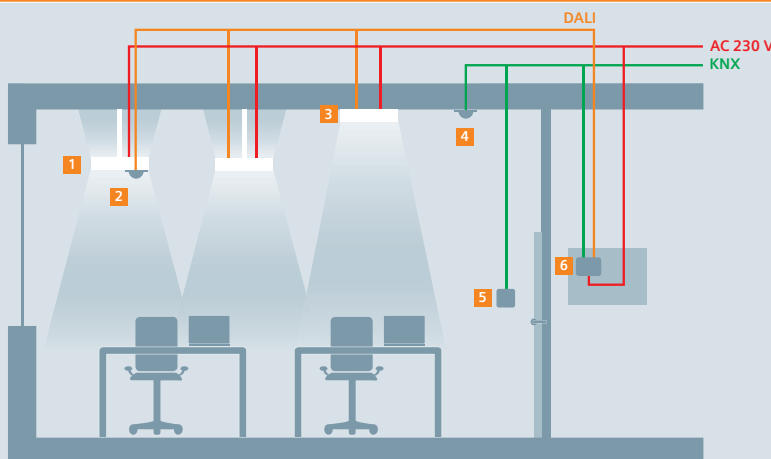
\* For more information about the ETS apps, please visit [www.knx.org/knx-tools/ets-apps](http://www.knx.org/knx-tools/ets-apps)

Answers for infrastructure.

# Efficient lighting control with KNX and DALI

The KNX/DALI Twin gateway makes lighting control more efficient while simplifying installation and configuration. This makes it an idea solution for offices and hotels.

## Lighting control with KNX and DALI – a strong team



### Legend:

- 1 Pendant light with electronic ballast
- 2 DALI combination sensor
- 3 Ceiling light with electronic ballast
- 4 KNX presence detector
- 5 KNX room controller/switch
- 6 KNX/DALI Twin gateway

### Integrating the DALI lighting system with KNX

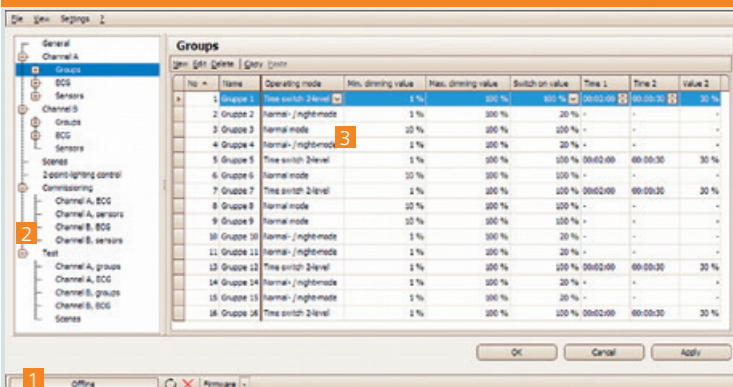
DALI allows lighting system controllers to be fully integrated via KNX. This is the easiest way to integrate lighting into a building automation system.

Planners can choose any suitable sensor with KNX and DALI. The KNX/DALI gateway transparently makes all functions

available through KNX. The function blocks can be used both internally and externally.

In optional standalone mode, all actions continue to be executed within the DALI lines if KNX fails.

## Efficient configuration through user-friendly ETS plug-in and optional add-on software (ETS apps)



### Legend:




- 1 Status line
- 2 Tree structure
- 3 Table view

### Easier, more efficient and more convenient thanks to ETS



- Clearly organized table view of the parameter pages with an Explorer-like tree structure
- Columns can be customized as needed as well as sorted and filtered
- Transfer parameters between rows
- Reset views and settings for a specific parameter page or globally for all pages
- Group communication object names according to function blocks with custom names

- Status line via KNX (connection status/firmware)
- Optimized downloads via KNX
- Backup of all configuration data within ETS
- Add-on software (ETS apps) for importing data and switching applications (in the KNX online shop)

### Technical data

Type	Description
 <p><b>N 141/31</b></p>	<p><b>N 141/31 KNX/DALI Gateway Twin</b></p> <ul style="list-style-type: none"> <li>• Communication via KNX EIB with electronic ballasts (ECG) with a DALI interface</li> <li>• Two (2) DALI output acc. to IEC 60929, each for communication with up to 64 DALI ballasts and at least 10 sensors</li> <li>• Integrated power supply with input voltage AC 110...240 V, 50/60 Hz or DC 120...240 V for powering the gateway electronics and DALI output</li> <li>• Maximum DALI output voltage of 19 V, short circuit resistant</li> <li>• LC display for displaying operation mode and error messages</li> <li>• Pushbutton for switching between bus and direct operating mode</li> <li>• Push buttons for switching On/Off of all connected DALI ballasts</li> <li>• One LED per DALI output for status signal of all connected luminaires in direct mode</li> <li>• Configurable assignment of max. 128 DALI ECG to max. 32 DALI groups, exclusive controlled in groups (switching, dimming, set dimming value) and feedback for group status and lamp failure</li> <li>• Configurable behaviour for bus failure (stand-alone mode)</li> </ul> <p>Accessories</p> <ul style="list-style-type: none"> <li>• Control (switching, dimming, set dimming value) of all connected luminaires together in broadcast mode</li> <li>• Status signal and display of lamp and ECG failure per group and per DALI device</li> <li>• Transformation of dimming commands into a temporary set point adjustment for ballasts with integrated constant light level control and directly connected light level sensor</li> <li>• One or two level timer</li> <li>• Integrated scene control for up to 32 scenes</li> <li>• 16 integrated 2-level-controller for brightness control</li> <li>• Assignment of DALI ECG to groups and test option for ECG, groups and scenes via ETS during commissioning</li> <li>• Assignment of DALI sensors and test option of sensors via ETS during commissioning</li> <li>• Integrated bus coupling unit with only half a standard bus load</li> <li>• Bus connection via bus terminal</li> <li>• For mounting on DIN rail EN 60715-TH35-7.5, Width 4 MW (1 Modular Width = 18 mm)</li> </ul>
	<p><b>DALI quadruple pushbutton interfaces</b></p> <ul style="list-style-type: none"> <li>• Binary input device</li> <li>• 4 inputs to connect installation buttons</li> <li>• Supported actions per input <ul style="list-style-type: none"> <li>- Short button press</li> <li>- Long button press</li> </ul> </li> <li>• Integrated DALI bus coupling unit for communicating with a central DALI controller</li> </ul> <ul style="list-style-type: none"> <li>• Power supply through DALI line with 6 mA DALI bus load</li> <li>• For flush-mounting wall or ceiling outlet installations with a 60 mm diameter and depth of 60 mm</li> <li>• Plug-in terminals for connecting the DALI line</li> <li>• Cable set for connecting pushbuttons</li> </ul>
	<p><b>DALI multi sensors for offices</b></p> <ul style="list-style-type: none"> <li>• Used as passive infrared detector for indoor ceiling installation <ul style="list-style-type: none"> <li>- Sensing range, horizontal 360 °, vertical approx. 80 °</li> <li>- For monitoring an area with a diameter of approx. 4 m to approx. 7 m (depending on mounting and room height)</li> <li>- LED on sensor head for display</li> </ul> </li> <li>• Used as brightness sensor <ul style="list-style-type: none"> <li>- cone-shaped detection area, opening angle 90 °</li> <li>- measuring range 20 lx to 1000 lx</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• Integrated DALI bus coupling unit for communicating with a central DALI controller</li> <li>• Power supply through DALI line with 5 mA DALI bus load</li> <li>• Plug-in terminals for connecting the DALI line</li> <li>• For installation in suspended ceilings</li> </ul>

### Selection and ordering data (06/2013)

Type	Version	DT	Order No.	PU	PS*/ P. unit	Weight per PU approx.
				Unit(s)	Unit(s)	kg
 <p>5WG1141-1AB31</p>	<p><b>N 141/31</b></p> <p><b>N 141/31 KNX/DALI Gateway Twin</b> Broadcast, 32 groups, 32 scenes, DALI-sensors</p>	A	<b>5WG1141-1AB31</b>	1	1	0,470
	Accessories					
 <p>5WG1141-2AB71</p>	<p><b>DALI quadruple pushbutton interfaces</b></p>	A	<b>5WG1141-2AB71</b>	1	1	0,040
 <p>5WG1141-2AB51</p>	<p><b>DALI multi sensors for offices</b></p>	A	<b>5WG1141-2AB51</b>	1	1	0,11

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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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#### **Answers for infrastructure.**

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

**“We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure.”**