

Zigbee 3.0



Light is networked

Professional luminaires made smart: Zigbee 3.0 DALI CONV LI

Simple connection of DALI luminaires to smart home control systems with the Zigbee DALI converter from OSRAM. This benefits the luminaire manufacturer, the installer and the user. **Light is OSRAM**

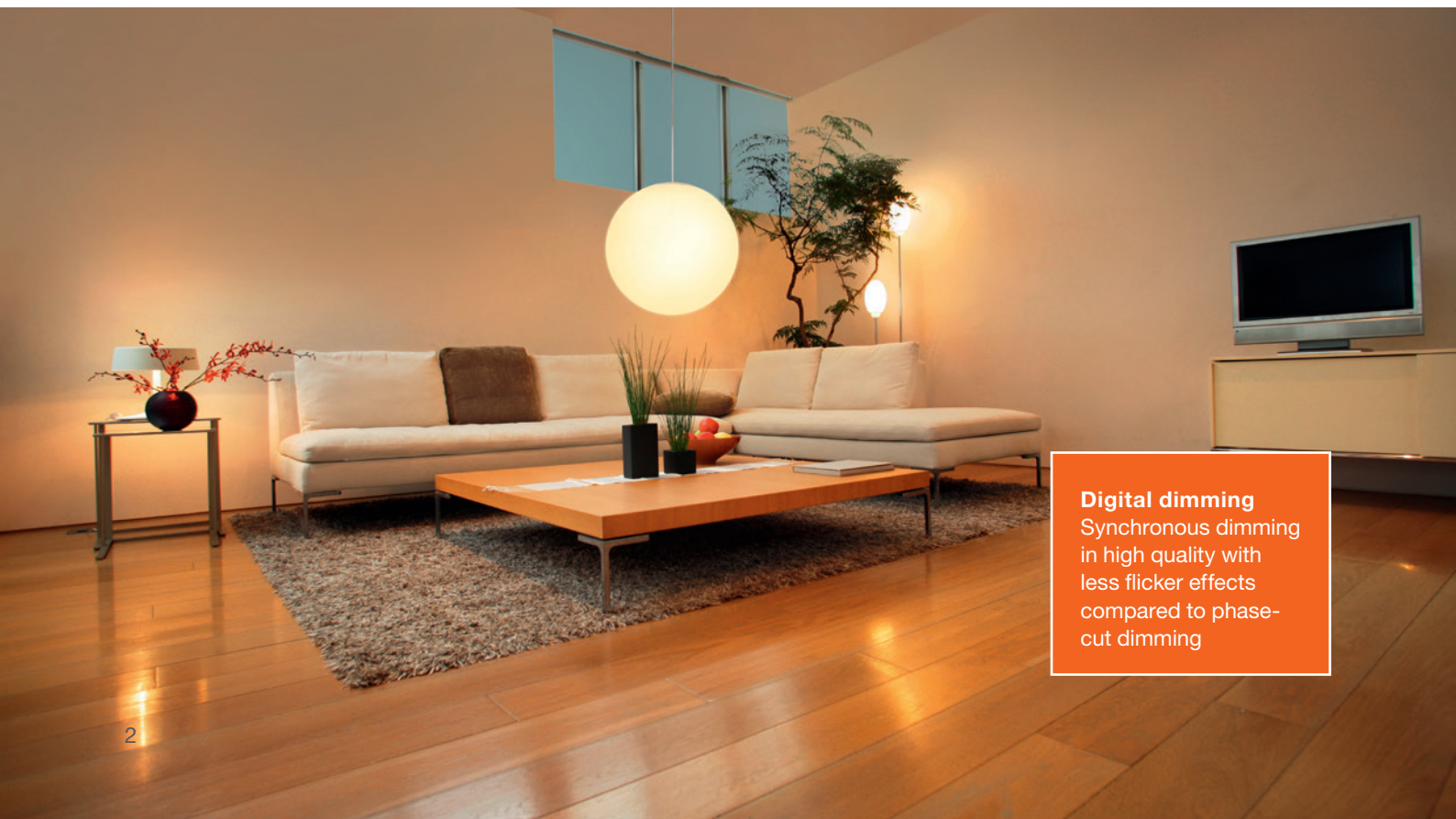


Light and smart technology easily combined

Digital lighting and smart home applications are already standard in new buildings today, both in private homes and offices. Many well-known manufacturers of digital speech assistants and gateways are using Zigbee 3.0 to provide a secure and universal standard. In addition to controlling building and entertainment technology, you can now integrate professional lighting into these systems – with Zigbee 3.0 DALI CONV LI.

This converter easily connects luminaires with standard DALI LED drivers or DALI DT8 LED drivers (Tunable White) to many standard Zigbee controllers. In this way, lighting can be turned into your very own personal light in no time at all, and it can also be set on demand.

A list of compatible Zigbee gateways can be found at www.osram.com/zigbee



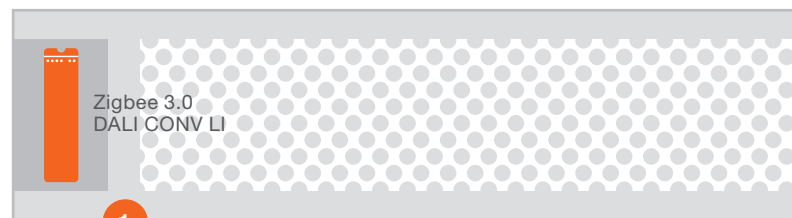
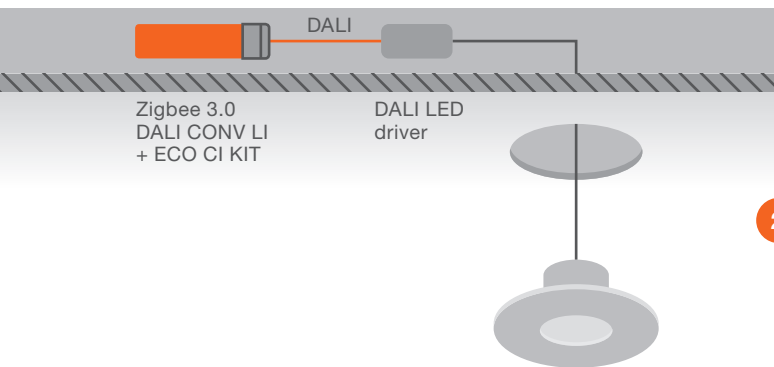
Digital dimming
Synchronous dimming in high quality with less flicker effects compared to phase-cut dimming

Flexible mounting, easy installation

The market for intelligently networked control systems is growing steadily. The key factors for the acceptance of digital infrastructures are simple commissioning, fast installation and maximum flexibility in daily use. With our converter, we are opening up a wide range of opportunities for luminaire manufacturers and installers to benefit from the growing trend towards digitalisation and to realise even very demanding projects with little effort.

Benefits for luminaire manufacturers

With our converter, you can upgrade DALI luminaires and offer them as Zigbee luminaires. You thereby avoid a doubling of your portfolio. The converter is suitable for all DALI luminaires. In terms of luminaire design, you have two options for connection.



1

Ex-works integration of Zigbee 3.0 DALI CONV LI into the luminaire

2

Independent mounting with the snap-on ECO CI KIT cable clamp

Benefits for installers

Using simple means, the Zigbee converter integrates the DALI luminaires into a smart home control system. Create future-proof systems with high lighting comfort!



High loads connectable

Operation of up to 8 DALI drivers on one converter



Supports Tunable White
Automatic detection of DALI DT8 devices



Increased safety standard thanks to Zigbee 3.0
Data safety and protection against external attacks

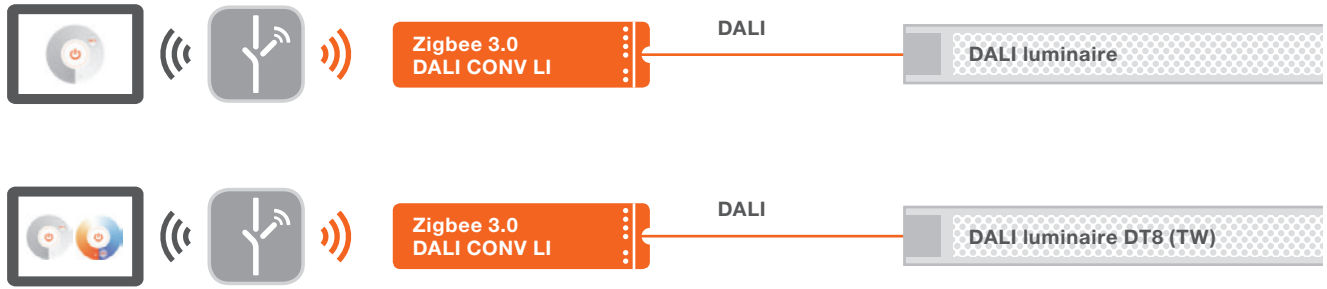


Downstream compatible
Older Zigbee versions can also be used



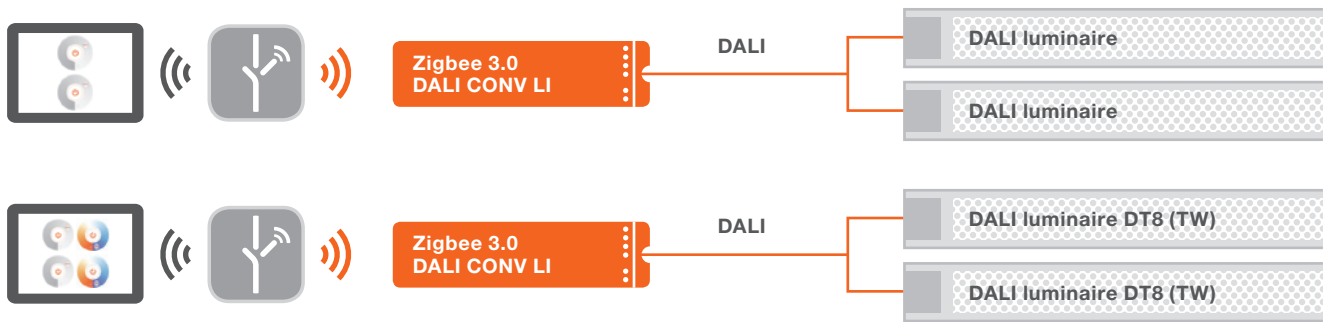
Plug and play
Time-saving, because configuration of the DALI devices is not required

Overview of the connected load combinations



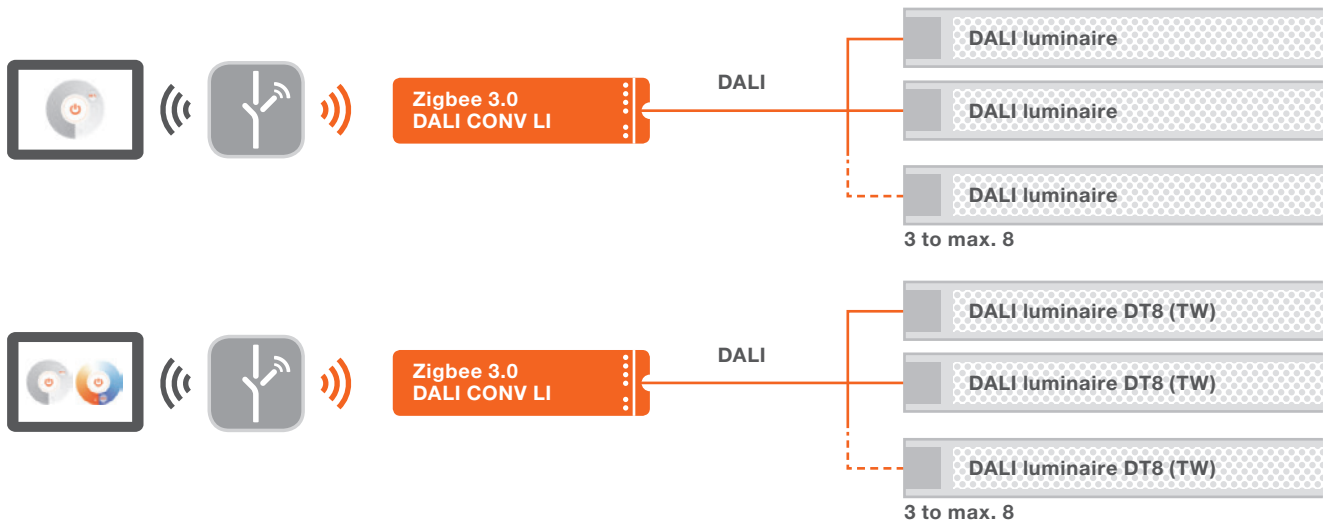
Connection of a DALI LED driver

Zigbee 3.0 DALI CONV LI can address a standard LED driver as well as a Tunable White LED driver (DT8) with a wireless range of up to 15m. A converter turns the DALI luminaire into a Zigbee network node that can be connected and controlled via a gateway. Depending on what type of DALI luminaire is connected, it can then either be only dimmed, or both dimmed and changed in terms of color temperature.



Connection of two DALI LED drivers

Two LED drivers (standard or DT8 (TW)) with a wireless range of up to 15m can also be addressed via the converter. In a pendant luminaire, for example, the direct and indirect light is controlled independently of each other. In this way, two Zigbee network nodes are created. The corresponding DALI luminaires can then either be only dimmed, or both dimmed and changed in terms of color temperature.



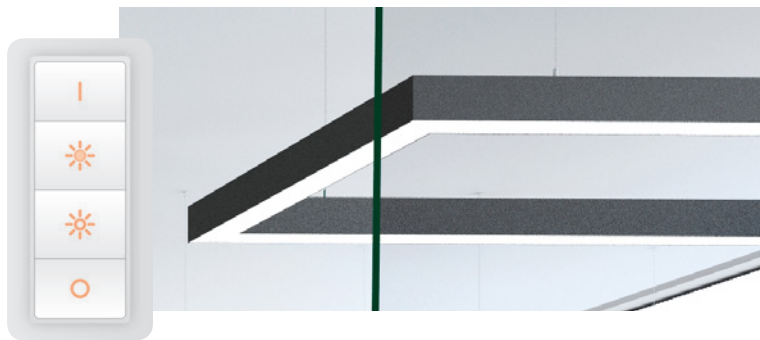
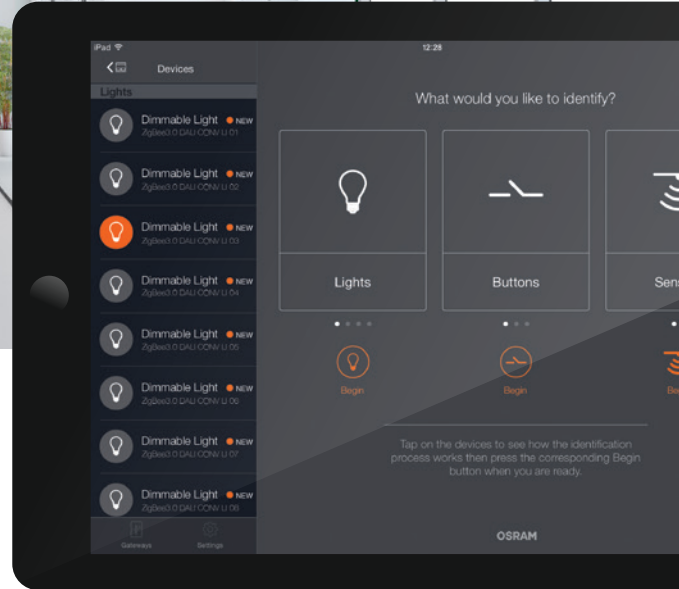
Connection of up to eight DALI LED drivers

A Zigbee 3.0 DALI CONV LI can control up to eight DALI LED drivers in broadcast mode and has a wireless range of up to 15m. This means that large outputs can be connected via one device. This applies to both standard and Tunable White drivers. In this way, a Zigbee network node is created. The corresponding DALI luminaires can then be either only dimmed, or both dimmed and changed in terms of color temperature.



Standard commissioning via App

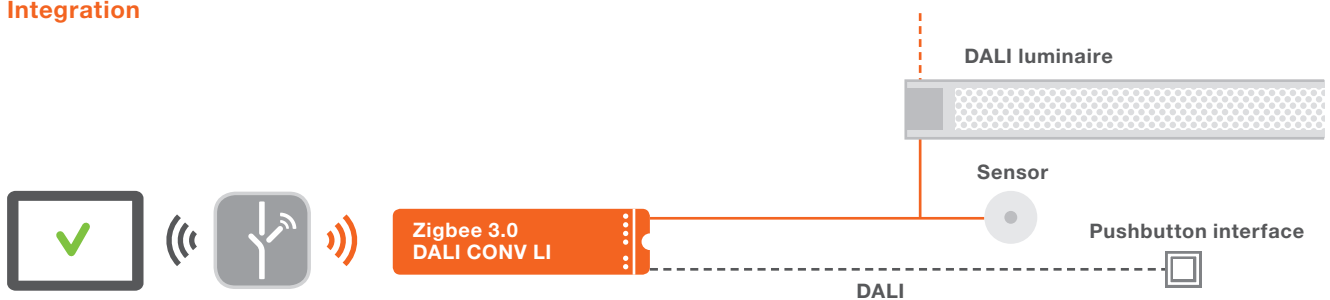
The Zigbee 3.0 DALI CONV LI supports both standard Zigbee commissioning (“Find and Join”) and commissioning via installation code (QR Code). All Zigbee-enabled devices in the immediate vicinity are displayed in the gateway manufacturer's app.



Commissioning via Touchlink

Some Zigbee controls support Touchlink. No gateway is required for this. The DALI luminaires are located in close proximity to each other and are automatically linked together by a key combination. The Touchlink control element must be in close proximity to the Zigbee 3.0 DALI CONV LI and can then be automatically coupled by pressing a key.

Integration



Integration of pushbuttons

Zigbee 3.0 DALI CONV LI has an integrated pushbutton interface which is suitable for connecting standard pushbuttons. This interface is activated the first time the pushbutton is pressed. This makes the pushbutton visible as a Zigbee network node and it can be integrated into the control system. The gateway software defines which functions the pushbutton can control.

Integration of sensors

Zigbee 3.0 DALI CONV LI supports OSRAM DALI sensors. These are displayed as Zigbee 3.0 light and presence detectors. The gateway must support the integration of Zigbee 3.0 light and presence detectors. The gateway software defines which functions the sensor can control.

The gateway must support the integration of Zigbee 3.0. pushbuttons and sensors. In the software of the gateway, the pushbutton can then be linked to the luminaires.

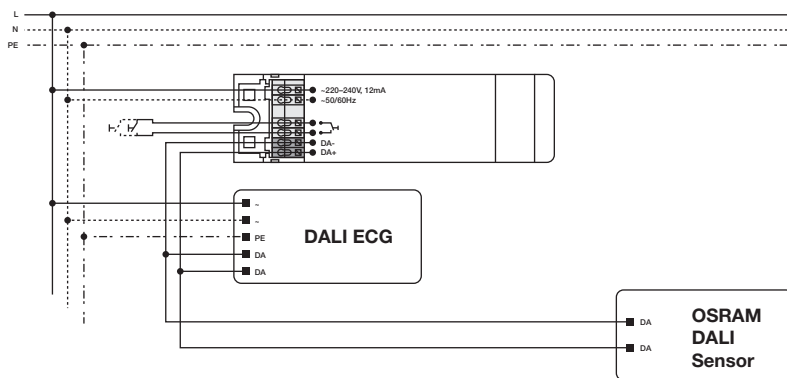
DALI converter



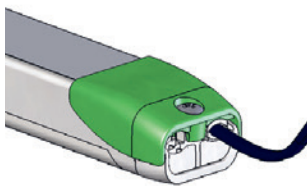
Zigbee 3.0 DALI CONV LI

- Control of up to 8 DALI or DALI-2 drivers in broadcast mode
- Integrated DALI supply for up to 24 mA
- Bidirectional DALI interface
- HCL Ready: DT8 Tunable White drivers supported
- Automatic recognition of the connected DALI devices
- Service life: 50,000 h at $t_a = 60^\circ\text{C}$
- Integrated interface Zigbee 3.0
- Typical wireless range 15 m, no external antenna required

Product name	GTIN (EAN)	Nominal supply voltage	Nominal power consumption	Control interface	Max. DALI supply current	Galvanic isolation DALI to mains	Dimensions
Zigbee 3.0 DALI CONV LI	4062172044776	230 V	0.3–1 W	DALI	24 mA	Basic insulation	108 x 30 x 21



ECO CI KIT



Mounting kit for independent installation and LMS control units

- Cable clamp for independent mounting
- Suitable for all OSRAM control devices with the dimensions 118 mm x 30 mm x 21 mm

Product name	GTIN (EAN)	Mounting type
ECO CI KIT	4008321392091	Suspended ceiling



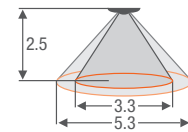
OSRAM DALI sensors



DALI LS/PD LI

Sensor for light management systems

- Compact housing design for luminaire installation
- Presence detection range adjustable between 40...90° via integrated shutters
- Daylight sensor integrated
- Power supply via DALI
- Compatible with several OSRAM DALI controllers



Product name	GTIN (EAN)	Dimensions [mm]
DALI LS/PD LI	4052899043954	48 x 15 x 17

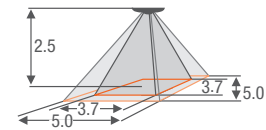
Mounting height	2	2.5	3	4	5
Presence	2.5	3.3	4	5	–
Motion	4.5	5.3	6	7	7



LS/PD DALI LI UF

Sensor for light management systems

- Only 11 mm installation depth
- Square coverage area
- Attachable shutters



Product name	GTIN (EAN)	Dimensions [mm]
LS/PD DALI LI UF	4052899984608	50 x 21 x 16

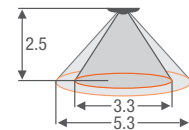
Mounting height	2	2.5	3	4
Presence	3	3.7	4.4	–
Motion	4	5	6	6.5



DALI LS/PD CI

Sensor for light management systems

- Housing design for ceiling installation (Ø 68 mm)



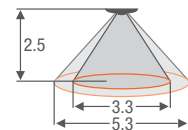
Product name	GTIN (EAN)	Ø	Height [mm]
DALI LS/PD CI	4052899930292	80	55

Mounting height	2	2.5	3	4	5
Presence	2.5	3.3	4	5	–
Motion	4.5	5.3	6	7	7



DALI PRO Sensor Coupler + LS/PD MULTI 3 CI + ECO CI KIT

- Suitable for architectural use due to particularly small design (< 50 mm)
- Power supply via DALI
- Connection of light and presence sensors to DALI systems



Product name	GTIN (EAN)	Dimensions [mm]
DALI PRO Sensor Coupler	4008321379269	118 x 30 x 21
LS/PD MULTI 3 CI	4008321916648	50 x 50 x 25
ECO CI KIT (optional)	4008321392091	–

Mounting height	2	2.5	3	4	5
Presence	2.5	3.3	4	5	–
Motion	4.5	5.3	6	7	7

All dimensions in this column in m

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