LEDVANCE: ADVANCING LIGHT

WHAT MAKES US DIFFERENT?
COMFORT.
WE’VE NAILED IT

With over 100 years of experience in general lighting, LEDVANCE combines traditional lighting technology with pioneering lighting innovations for almost any application. In addition to this unique know-how, we particularly rely on long-term customer relationships and a strong global sales network.

As technology trend experts, we are leading the way in meeting the rapidly changing demands for high-quality and long-lasting light. And as a strong local partner, we are always reliably at your side in over 140 countries.

Whether it’s luminaires, lamps, our LED Strip System or state-of-the-art light management solutions, our teams of specialists are focused on the specific needs of our customers. We are making a decisive contribution to increasing your competitiveness with technical innovations and easy-to-use, intelligent lighting solutions compliant with EU regulations.

With LEDVANCE VIVARES, our future-proof IoT light management system for office solutions, we now provide significantly more comfort in every respect. From configuration and installation to operation, VIVARES makes it easier than ever to bring connected light to life. The optional use of the VIVARES Cloud services offers convenient remote diagnosis and energy monitoring for additional savings.

We always focus on the benefit for you as a lighting professional. That’s why we do everything we can to make our products and systems particularly easy to plan, install and combine.

Based on these principles, we will continue to develop sophisticated products and provide you with optimum support in your personal fight against bad light.
# CONTENTS

## LEDVANCE: ADVANCING LIGHT

- LEDVANCE VIVARES | CONTENTS

## VIVARES: LIGHT MANAGEMENT, MORE COMFORTABLE THAN EVER

- 04

## VIVARES CLOUD SERVICES: MONITORING AND OPTIMIZATION

- 06

## CASE STUDY: OFFICE BUILDING, MOLSHEIM/FRANCE

- 08

### VIVARES ZIGBEE

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIVARES ZIGBEE – WIRELESS: FUNCTION AND OPERATION</td>
<td>10</td>
</tr>
<tr>
<td>COMMISSIONING</td>
<td>12</td>
</tr>
<tr>
<td>PRODUCT RANGE</td>
<td></td>
</tr>
<tr>
<td>- LMS COMPONENTS</td>
<td>14</td>
</tr>
<tr>
<td>- LUMINAires / ACCESSORIES</td>
<td>20</td>
</tr>
<tr>
<td>BIOLUX HCL – BENEFITS AND APPLICATION</td>
<td>36</td>
</tr>
<tr>
<td>BIOLUX HCL AND VIVARES ZIGBEE HCL</td>
<td>37</td>
</tr>
<tr>
<td>BIOLUX HCL PRODUCT RANGE</td>
<td>39</td>
</tr>
</tbody>
</table>

### VIVARES DALI

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIVARES DALI – WIRED: FUNCTION AND OPERATION</td>
<td>40</td>
</tr>
<tr>
<td>COMMISSIONING</td>
<td>42</td>
</tr>
<tr>
<td>PRODUCT RANGE</td>
<td></td>
</tr>
<tr>
<td>- LMS COMPONENTS</td>
<td>44</td>
</tr>
<tr>
<td>- LUMINAires / ACCESSORIES</td>
<td>58</td>
</tr>
</tbody>
</table>

### FURTHER INFORMATION ON SERVICES, LEDVANCE AND ABBREVIATIONS

- 76

The pictures in the brochure are for illustration purposes only.

Online at ledvance.com/vivares
VIVARES: LIGHT MANAGEMENT,

VIVARES, the future-proof IoT light management system (LMS) from LEDVANCE, brings light to life. It makes it easier and more flexible than ever to always produce optimum lighting conditions for defined requirements. The system is suitable for all office solutions and is extremely reliable and compatible. LEDVANCE offers you everything from one source: all LMS components and matching LED luminaires.

WIRELESS, MODERN, FLEXIBLE: VIVARES ZIGBEE

YOUR IDEAL SOLUTION IF YOU CAN’T MAKE TOO MANY STRUCTURAL CHANGES AND/OR ARE LOOKING FOR FLEXIBLE ROOM SITUATIONS.

The wireless VIVARES Zigbee system is ideal for modernizing existing buildings where rewiring is often not an option. If a building is listed or has no suspended ceilings, you will need products that require no additional control lines. Even in situations where the distribution of light needs changing more often, VIVARES Zigbee is the perfect choice because the system is easy to adapt.

LEVDANCE offers you the necessary components and a well-assorted selection of compatible LED luminaires which allow the VIVARES Zigbee system to provide energy-saving lighting in existing buildings. As an option, the system can be connected to a cloud application to generate maintenance and energy consumption reports.

VIVARES Zigbee in an existing building: panel luminaires, downlights and pendant luminaires are wirelessly connected to the VIVARES Zigbee controller and sensors.
VIVARES DALI in a new office building: panel luminaires and downlights are integrated into the suspended ceilings and, using cables, are connected to the LMS components such as sensors. Additionally, pendant luminaires were installed in the conference room.

VIVARES DALI is ideal for new buildings and renovations, with room for additional control lines.

The system is suitable if the control lines can be wired and the requirements for assigning the light distribution are long-term. All VIVARES DALI products are DALI-2-certified and technically matched to perfection. Since this is an open system, it is also compatible with other DALI-2 products.

Commissioning is simple and self-explanatory via a browser-based commissioning tool. And of course VIVARES DALI is also ready for the Internet of Things (IoT) – and therefore capable of generating maintenance and energy consumption reports via the VIVARES Cloud.

Another advantage of the portfolio is its great flexibility. Whether you go for the wireless option via VIVARES Zigbee or the wired version based on DALI technology, we always have the right solution for you and support you every step of the way. But what you can expect from both technologies is that they are extremely comfortable and easy to install by anyone.
KEEP AN EYE ON EVERYTHING: CLOUD SERVICES FOR VIVARES DALI AND VIVARES ZIGBEE

Welcome to the Internet of Things! Using the VIVARES Cloud, you now have access to the data of your lighting system from anywhere. This allows you to make its operation even more efficient, reliable, energy-saving and cost-effective.

The cloud services for VIVARES DALI and VIVARES Zigbee enable you to optimize your lighting system wherever you are. With the intuitive dashboard you can monitor energy consumption, the operating hours of the drivers and the relevant lighting data, among other things. Various filter functions give you the option of analyzing the data according to your needs.

SERVICE THAT IS WELL WORTH IT

- Optimize your energy consumption
- Reduce maintenance costs – adapt the maintenance cycle to actual demand
- Diagnose faults from any location. All you need is internet access and a tablet/PC
- Future-proof with the option of new services

VIVARES CLOUD SERVICES: ACCESS IN A FEW STEPS

BEFORE YOU START

- Make a note of the serial number (ID number) of your VIVARES Zigbee or DALI controller
- Electrify all the installed luminaires and components

START REGISTRATION

To do this, go to: ledvance.com/vivares-cloudservice

ORDER FORM

Enter the required information in the order form
You will receive your registration confirmation by email within a few business days.

This email contains a link for your secure access to the cloud services.

Our support team will be happy to assist you. Just send an email to:
shop.vivares@ledvance.com

Would you like to learn more about our cloud services – with no strings attached? Then take advantage of our free trial.
LEDVANCE VIVARES | CASE STUDY: OFFICE BUILDING, MOLSHEIM/France

LEDVANCE LUMINAIRES COUPLED WITH VIVARES ZIGBEE GUARANTEE QUALITY OF LIGHT AND COMFORT OF USE.

THE CHALLENGE

Achieving energy savings while ensuring a high level of illumination, modernizing the existing traditional lighting with state-of-the-art technology as simply as possible – these were the objectives of this renovation. This renewal also had to meet the requirements of the 2019 tertiary decree and the lighting pollution decree which aim to reduce energy consumption and automatically turn off the lights at night.

THE SOLUTION

All traditional luminaires were replaced with an LED lighting solution in combination with VIVARES Zigbee. This light management system, coupled with presence and light sensors, ensures a significant reduction in energy consumption and offers functionalities such as the creation of maintenance and energy consumption reports via the VIVARES Cloud. In one of the open-plan offices 105 PANEL PERFORMANCE and 10 DOWNLIGHT PERFORMANCE luminaires were installed.

The meeting room has been modernized with 11 DOWNLIGHT PERFORMANCE and 4 PANEL DIRECT/INDIRECT luminaires.

All luminaires installed are in UGR < 19 and with Zigbee technology. With VIVARES Zigbee, scenarios have been predefined so that the user can choose lighting scenes according to their activity (work meeting, presentation). The corridors were refurbished with 30 DOWNLIGHT PERFORMANCE luminaires. To allow full automation of the lighting system, 38 VIVARES Zigbee sensors were installed in the offices, corridors and stairs.

The lighting automatically turns on when the first employee arrives and turns off when the premises are unoccupied. Pushbutton-couplers have also been installed to allow users to dim the lighting as required or select a predefined scene. The last person to leave the building in the evening can also manually turn off the lights. However, the system automatically turns off the lights if no person is detected.

“We were impressed by the speed of installation. All the lighting fixtures (offices, meeting rooms and corridors) were changed without dust, without excessive noise and thus without affecting the activity of the employees at the office. We can monitor consumption levels in real time thanks to energy monitoring. It’s easy and a lot of fun. Our employees appreciate the comfort of this new lighting installation. Every requirement was met from comfort to energy savings.”

Facility Manager of the building

COMFORT – SAVINGS – SIMPLICITY

A 100 % AUTOMATED SYSTEM
THE BENEFITS

VIVARES Zigbee offers many advantages.

FOR PROJECT INSTALLERS:

The luminaires were replaced 1:1 and the system is controlled through a wireless Zigbee connection between luminaires, VIVARES controller and sensors. Thanks to the online configuration tool, VIVARES Portal, the project could be configured in advance of the installation. This saved valuable time for commissioning on the day of installation. Pairing was done easily and intuitively via QR codes: they were simply placed on the installation tab available in the VIVARES Portal and then scanned via the VIVARES application. Simple and efficient!

FOR USERS:

The system automatically adjusts the light level, regardless of how much natural light is available during the day or in the evening. This ensures a constant brightness level at all times. It also saves energy and guarantees comfort. In addition, automatic switch-on thanks to presence detection is an interesting aspect. Each employee can also select predefined scenes according to the current activity, for example a presentation scene during a meeting. The right lighting at the right time!

FOR BUILDING OWNERS/FACILITY MANAGERS:

Thanks to the monitoring function, the facility manager can view the status of each luminaire in real time via a dashboard (lifetime, turn-on time, level of consumption). On the one hand, this makes it easier to anticipate maintenance operations and, on the other, to obtain a detailed report of the consumption information to be sent to the government agency. Remotely, the technician can also change the parameters on the sensors, the lighting timings and the switch-on times, if necessary.

COMPONENTS

- PANEL PERFORMANCE ZIGBEE
- PANEL DIRECT/INDIRECT 1200 UGR < 19 ZIGBEE
- DOWNLIGHT UGR19 ZIGBEE
- VIVARES ZB Control
- VIVARES ZB L/O SENS 220-240

SUMMARY

The LEDVANCE VIVARES Zigbee wireless light management system allowed direct and easy replacement of the luminaires without any structural modification of the building or complex rewiring. Coupled with a detection system, the energy savings for the company are high.

This light management system also meets the requirements of the tertiary decree which mandates a reduction in energy consumption in buildings, as well as the French lighting pollution decree, which requires automatic turn-off at night when the building is not occupied.

In addition, the monitoring function of the VIVARES Cloud enables detailed reports on energy consumption and an overview of the status of all devices. With VIVARES, it is so easy to enter the age of connectivity.
VIVARES ZIGBEE: FUNCTIONALITY, INSTALLATION

THE KEY COMPONENT OF VIVARES ZIGBEE IS THE CONTROLLER.

VIVARES Zigbee Control communicates wirelessly with up to 200 Zigbee-ready devices via Zigbee 3.0. These include the VIVARES Zigbee luminaires, sensors, pushbutton couplers and a Zigbee DALI converter for the additional integration of DALI-2 luminaires.

Potential applications range from small lighting projects to complete floor solutions. And even after commissioning, expanding the system with additional components is no problem at all. The system and its components are very easy to configure and commission via the VIVARES Portal (p. 12). And it can also be maintained remotely using the VIVARES Portal.

New software features are continually integrated into the system through online updates. But it doesn’t need an internet connection for commissioning and operation.

3D view of balanced positioning of sensors and light sources to achieve the desired light distribution.

VIVARES ZIGBEE IN USE

<table>
<thead>
<tr>
<th>Application</th>
<th>L/O sensor</th>
<th>O sensor</th>
<th>Function</th>
<th>Setting</th>
<th>Pushbutton coupler</th>
<th>Function</th>
<th>Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-plan office</td>
<td>✔</td>
<td>–</td>
<td>Daylight control and presence detection</td>
<td>Sensor delay 5 min. Daylight control active</td>
<td>✔</td>
<td>ON/OFF/DIM/scenes</td>
<td>One sensor per luminaire group (workplace)</td>
</tr>
<tr>
<td>Meeting room</td>
<td>✔</td>
<td>✔</td>
<td>Optional daylight control (e.g. for rooms with glass walls) and presence detection</td>
<td>Sensor delay 5 min. Daylight control active</td>
<td>✔</td>
<td>ON/OFF/DIM/scenes</td>
<td>Depending on the detection range of the sensor (the sensor is usually positioned in such a way that the entrance area and the conference table are detected at the same time. If both are not detected at the same time, install a second sensor.)</td>
</tr>
<tr>
<td>Restrooms</td>
<td>–</td>
<td>✔</td>
<td>Motion and presence detection</td>
<td>Sensor delay 5 min.</td>
<td>✔</td>
<td>ON/OFF</td>
<td>A separate sensor for each toilet cubicle. Other than that, cover the entrance areas and common areas (sinks, urinals, etc.).</td>
</tr>
<tr>
<td>Kitchen</td>
<td>✔</td>
<td>–</td>
<td>Motion and presence detection</td>
<td>Sensor delay 5 min. Daylight control active</td>
<td>✔</td>
<td>ON/OFF/DIM</td>
<td>Cover areas by the window with L/O sensor (same requirement as for open-plan offices)</td>
</tr>
<tr>
<td>Corridor</td>
<td>✔</td>
<td>✔</td>
<td>Motion and presence detection</td>
<td>Sensor delay 5 min.</td>
<td>✔</td>
<td>ON/OFF/DIM</td>
<td></td>
</tr>
<tr>
<td>Warehouse, lab, etc.</td>
<td>✔</td>
<td>✔</td>
<td>Motion and presence detection</td>
<td>Sensor delay 5 min.</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Project size: Up to 200 devices

Distance from ZB products (indoors): 10 m max. for stable and reliable operation

Installation tools:
- Router
- LAN cable
- Mobile device
- QR code (installation booklet) (download from the VIVARES Portal after preconfiguration of the project)

VIVARES Portal: Contains templates for the above-mentioned rooms. The products matching the room are automatically suggested in the VIVARES Portal.

1 L/O = light and occupancy | 2 O = occupancy
GOOD REASONS FOR CHOOSING VIVARES ZIGBEE:

- Ideal for modernizing existing buildings where no rewiring is needed
- Based on the international Zigbee 3.0 standard
- Quick and easy installation and QR code-based commissioning
- Simple reconfiguration of the components when the use of rooms changes
- Maintenance and energy consumption reports from anywhere

FUTURE-PROOF OPTIONS

Thanks to its gateway function, the controller also provides the option of using LEDVANCE VIVARES Cloud services to generate maintenance and energy consumption reports.

Lighting calculation from LEDVANCE combines matching LMS components and luminaires for optimal lighting. These are illustrative layouts with isolines or lux values.

VIVARES ZIGBEE: WIRELESSLY CONNECTED AND READY FOR THE INTERNET OF THINGS (IOT)

TRAIN HARD, REAP THE REWARD: LEDVANCE TRAINING FOR PROFESSIONALS

LEDTVANCE gives you the option of deepening your expertise in light management. You can choose from different courses:

1. Our online training center includes training modules where you can learn all about Zigbee technology and individual light management components. Visit training.ledvance.com for our online training courses.

2. Our YouTube channel is packed with product training videos, commissioning instructions and more. Check them out at ledvance.com/zigbeevideos

Take advantage of this opportunity and gain valuable knowledge that keeps you ahead of the competition.

Our experts are happy to support you in planning and implementing your light management system. Just get in touch at: kundenservice@ledvance.com
MAKE YOURSELF COMFORTABLE
CONFIGURING AND COMMISSIONING USING THE VIVARES PORTAL

Projects, rooms, devices or groups can be adjusted very quickly and from anywhere with VIVARES Zigbee. What’s more, it requires no complicated programming because you work with predefined rooms or situations. And commissioning itself is as quick as a flash with the support of QR codes.

To ensure a smooth workflow, you can also invite all participants to the project. The portal is self-explanatory and intuitive. It is available for iOS and Android mobile devices as well as for PCs. Simply download the free VIVARES app from the respective app store or log into the browser-based PC version!

FROM PROJECT PLANNING TO OPERATION IN 5 STEPS

1. CREATE AN ACCOUNT
Register on the VIVARES Portal, create your account and log in: portal.vivares.ledvance.com

2. PLAN AND PRECONFIGURE IN THE VIVARES PORTAL
- Create a project
- Add luminaires and components
- Upload the building plan
- Configure groups, scenes and schedules
- Create rooms

3. ORDER
- Download the parts list from the portal
- Order the products through the trade partner

4. COMMISSION
- Download the QR code installation booklet
- Install the luminares/components on site, pull off the QR codes and stick them in the QR code installation booklet
- Scan the QR codes using a mobile device and the VIVARES app
- Connect the VIVARES Zigbee control and mobile device to the local network
- Upload the preconfiguration from step 2 to the VIVARES Zigbee control
- The network is set up automatically in the background

5. FINALIZE AND OPERATE
- Test the lighting system and get customer acceptance
- Remote access for post installation adjustments
- Optional VIVARES Cloud services: create maintenance and energy consumption reports (find out more from page 6)
INTUITIVE AND SELF-EXPLANATORY: WORKING WITH THE VIVARES PORTAL

1. Registration and login
2. Projects and project status
3. Create rooms
4. Add luminaires and components
5. Configuration complete: The parts list is available.
6. Parts list and QR code installation booklet
7. Scan the QR codes using a mobile device and the VIVARES app
8. Upload the preconfiguration to the VIVARES control
9. Remote access for post installation adjustments
CONTROLLER ZIGBEE

Zigbee 3.0 controller with integrated gateway for small to mid size projects up to 200 endpoints

PRODUCT FEATURES
— Lighting control unit based on wireless Zigbee 3.0 technology
— IoT ready thanks to built-in gateway
— Connect up to 200 endpoints in one network
— Built-in Human Centric Lighting control
— QR-Code based commissioning of all lighting system components

PRODUCT BENEFITS
— Pre-configuration allows efficient planning & configuration of entire project remotely
— QR-code based commissioning enables automatic configuration of system
— Local operation of system even without active internet connection possible
— Remote access functionality saves time for post-installation adjustments
— Wireless communication avoids re-wiring in case of renovations

AREAS OF APPLICATION
— Room control, floor control, daylight-dependent control
— Connection of light and presence sensors in Zigbee systems
— Conference rooms
— Offices: Individual and group workplaces
— Suitable for indoor applications

FURTHER PRODUCT DETAILS

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₚ</th>
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<th>Tₕ</th>
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</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions
SENSOR ZIGBEE
Zigbee 3.0 light and presence sensor, ceiling integration

PRODUCT FEATURES
- Wireless Zigbee 3.0 light and presence sensor for ceiling integration
- Perfect fit for office application
- Presence detection via passive IR element
- AC mains powered 220–240 V
- Mounting height: 2…5 m

PRODUCT BENEFITS
- Works together with VIVARES ZB Control & Components
- Easy installation and no control wires needed
- 5 years guarantee

AREAS OF APPLICATION
- Offices
- Corridors
- Classrooms
- Training rooms
- Stairways
- Sanitary areas

FURTHER PRODUCT DETAILS
Detection area of the sensor in meter

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<th>3.5</th>
<th>4.0</th>
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<td>4.5</td>
<td>4.5</td>
<td>4.0</td>
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FITTING COMPONENTS
VIVARES ZB SENS ADAPTER
4058075650107
Zigbee Sensor adapter for surface mounted ceiling installation

TECHNICAL DATA

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<th>h</th>
<th>Tₑₚ</th>
<th>L x W x H (mm)</th>
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<tr>
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<td>220–240</td>
<td>50/60</td>
<td>90°</td>
<td>7 m</td>
<td>10...2 000</td>
<td>2…5</td>
<td>—20...+ 50°C</td>
<td>Recessed</td>
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</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
SENSOR ZIGBEE
Zigbee 3.0 presence sensor, ceiling integration

PRODUCT FEATURES
— Wireless Zigbee 3.0 presence sensor for ceiling integration
— Perfect fit for office application
— Presence detection via passive IR element
— AC mains powered 220–240 V
— Mounting height: 2…5 m

PRODUCT BENEFITS
— Works together with VIVARES ZB Control & Components
— Easy installation and no control wires needed
— 5 years guarantee

AREAS OF APPLICATION
— Offices
— Corridors
— Classrooms
— Training rooms
— Stairways
— Sanitary areas

FURTHER PRODUCT DETAILS

FITTING COMPONENTS

TECHNICAL DATA

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<th>Hz</th>
<th>Lx [lm]</th>
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<td>50/60</td>
<td>90°</td>
<td>7</td>
<td>5</td>
<td>–20…+50°C</td>
<td>Recessed</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
CONTROL ELEMENT ZIGBEE
Zigbee 3.0 pushbutton coupler to integrate standard switches into a wireless lighting system

PRODUCT FEATURES
— Pushbutton coupler with wireless Zigbee 3.0 technology
— AC mains or DC operation possible

PRODUCT BENEFITS
— Works together with VIVARES ZB Control & Components
— 4 fully programmable inputs for individual control
— Control rooms, groups, devices and recall scenes
— Small dimensions allow mounting in standard flush box
— Quick and easy installation without additional control cables

AREAS OF APPLICATION
— Offices
— Corridors
— Classrooms
— Training rooms
— Stairways
— Sanitary areas

FURTHER PRODUCT DETAILS

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
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<th>Vₚ</th>
<th>Hz</th>
<th>Tₐ</th>
<th>L, W, H (mm)</th>
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<tr>
<td>VIVARES ZB COUPLER</td>
<td>405807483806</td>
<td>100–240</td>
<td>50/60</td>
<td>–20 … + 50 °C</td>
<td>50 x 43 x 15</td>
<td>4</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions
ZIGBEE 3.0 DALI CONV LI
Converter to integrate DALI luminaires into Zigbee-based control systems

PRODUCT FEATURES
— Integrated Zigbee transceiver module
— DALI interface for addressed or broadcast operation
— Outputs with electronic reversible overtemperature, short-circuit, overload protection
— 1–2 DALI control gears in addressed mode
— 3–8 DALI control gears in broadcast mode

PRODUCT BENEFITS
— Support standard DALI and DALI DT8 (Tunable White) control gears
— Automatic operating mode detection after each restart
— Zigbee 3.0 certified including enhanced security standard
— Synchron switching and dimming of up to 8 DALI control gears
— Reliable dimming through digital control of the drivers

AREAS OF APPLICATION
— Smart Homes
— Offices

EQUIPMENT / ACCESSORIES
— Ceiling or independent installation via ECO CI KIT possible

FURTHER PRODUCT DETAILS

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>V&lt;sub&gt;a&lt;/sub&gt;</th>
<th>Hz</th>
<th>T&lt;sub&gt;b&lt;/sub&gt;</th>
<th>L × W × H [mm]</th>
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<tbody>
<tr>
<td>Zigbee 3.0 DALI CONV LI</td>
<td>4062172/044776</td>
<td>220–240</td>
<td>50/60</td>
<td>–20…+60 °C</td>
<td>108 × 30 × 21</td>
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</tbody>
</table>

Products of OSRAM GmbH, distributed by LEDVANCE.
SENSOR ZIGBEE ADAPTER
Zigbee Sensor adapter for surface mounted ceiling installation

FITTING COMPONENTS

VIVARES ZB L/O SENS 220-240
GTIN (EAN) 4058075446182
Light and presence sensor

VIVARES ZB O SENS 220-240
4058075544222
Presence sensor

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
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<td>VIVARES ZB SENS ADAPTER</td>
<td>4058075690107</td>
<td>PC  White</td>
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</table>
**PANEL INDIVILED® ZIGBEE**

Square recessed luminaire with IndiviLED® optics, with Zigbee 3.0 technology

---

**PRODUCT FEATURES**

- IoT-ready luminaire with Zigbee 3.0 technology
- Each LED with individual lens and reflector for UGR < 16 and homogenous light distribution
- Lifetime (L80/B50): up to 50 000 h (at 25 °C)
- Metal housing, polycarbonate (PC) lenses and reflectors
- Luminous flux: up to 4 000 lm

**PRODUCT BENEFITS**

- Suitable luminaire for VIVARES and other Zigbee 3.0 Light Management Systems
- Homogenous light distribution and reduced glare thanks to the IndiviLED® optics
- Energy savings of up to 50 % (compared to luminaires that use fluorescent lamps)
- Robust structure with IK08
- Low flicker light thanks to special electronic control gear

**AREAS OF APPLICATION**

- Direct replacement for luminaires with fluorescent lamps
- Corridors
- Offices
- Conference rooms
- Reception areas

**EQUIPMENT / ACCESSORIES**

- Accessories for several mounting options available
- Security rope for luminaire included
- External control gear included

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**FURTHER PRODUCT DETAILS**

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1 Refer to www.ledvance.com/guarantee for precise conditions

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### PANEL INDIVLED® ZIGBEE

Square recessed luminaire with IndiviLED® optics, with Zigbee 3.0 technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
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<th>K</th>
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<th>L80</th>
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<td>4058075521841</td>
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<td>4000</td>
<td>115</td>
<td>80 000</td>
<td>60 000</td>
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<td>4058075521865</td>
<td>33</td>
<td>4000</td>
<td>115</td>
<td>80 000</td>
<td>60 000</td>
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</table>

<table>
<thead>
<tr>
<th>Product name</th>
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<th>UGR</th>
<th>L × W × H [mm]</th>
<th>IK</th>
<th>Ø × H [mm]</th>
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<tbody>
<tr>
<td>PL INDV 600 ZIGBEE 33W 4000 K</td>
<td>≥ 80</td>
<td>&lt; 16</td>
<td>3 500</td>
<td>595 × 595 × 13</td>
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</tr>
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1 t [h]: L70/B50 @ 25°C (Ta) / t [h]: L80/B10 @ 25°C (Ta)

SUPERIOR CLASS  PERFORMANCE CLASS  VALUE CLASS
LEDVANCE VIVARES | LUMINAIRES AND ACCESSORIES ZIGBEE

# PANEL PERFORMANCE ZIGBEE

Square recessed panel luminaires, tool-free installation and low glare, for ceiling systems with Zigbee 3.0 technology

---

## PRODUCT FEATURES

- IoT-ready luminaire with Zigbee 3.0 technology
- Extruded aluminum frame
- Polystyrene diffuser
- 5-pole terminal block, cable cross section up to $5 \times 2.5 \text{ mm}^2$

## PRODUCT BENEFITS

- Suitable luminaire for VIVARES and other Zigbee 3.0 Light Management Systems
- Tool-free electrical connection due to push button connector
- Through-wiring possible with included connector box
- Energy savings thanks to high system efficacy: up to 120 lm/W
- Good glare reduction (UGR < 19)

## AREAS OF APPLICATION

- Direct replacement for luminaires with fluorescent lamps
- Offices, conference rooms
- Reception areas, foyers, corridors, elevators

## EQUIPMENT / ACCESSORIES

- Accessories for several mounting options available
- Connector box with 5-pole terminal included
- Security rope for luminaire included

---

## FURTHER PRODUCT DETAILS

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.

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1 Refer to www.ledvance.com/guarantee for precise conditions

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### PANEL PERFORMANCE UGR<19 ZIGBEE
Square recessed panel luminaires, tool-free installation and low glare, for ceiling systems with Zigbee 3.0 technology

<table>
<thead>
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<th>Lm</th>
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<td>PL PFM 600 UGR&lt;19 ZIGBEE 36W 4000 K</td>
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<td>4058075522862</td>
<td>4 x 18 W/4 x 14 W FL</td>
<td>36</td>
<td>4320</td>
<td>120</td>
<td>4000</td>
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<tr>
<td>PL PFM 625 UGR&lt;19 ZIGBEE 36W 4000 K</td>
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<td>4058075522886</td>
<td>4 x 18 W/4 x 14 W FL</td>
<td>36</td>
<td>4320</td>
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</table>

<table>
<thead>
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<th>Product name</th>
<th>CRI</th>
<th>UGR</th>
<th>L × W × H [mm]</th>
<th>Ø × H [mm]</th>
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<td>&lt; 19</td>
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<td>PL PFM 625 UGR&lt;19 ZIGBEE 36W 4000 K</td>
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<td>&lt; 5 %</td>
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### PANEL PERFORMANCE ZIGBEE
Square recessed panel luminaires, tool-free installation, for ceiling systems with Zigbee 3.0 technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>Lm</th>
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<th>L80</th>
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<tr>
<td>PL PFM 600 ZIGBEE 36W 4000 K</td>
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<td>4058075522924</td>
<td>4 x 18 W/4 x 14 W FL</td>
<td>36</td>
<td>4320</td>
<td>120</td>
<td>4000</td>
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<tr>
<td>PL PFM 625 ZIGBEE 36W 4000 K</td>
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<td>4 x 18 W/4 x 14 W FL</td>
<td>36</td>
<td>4320</td>
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<td>4000</td>
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<table>
<thead>
<tr>
<th>Product name</th>
<th>CRI</th>
<th>UGR</th>
<th>L × W × H [mm]</th>
<th>Ø × H [mm]</th>
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<tr>
<td>PL PFM 600 ZIGBEE 36W 4000 K</td>
<td>&gt; 80</td>
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<tr>
<td>PL PFM 625 ZIGBEE 36W 4000 K</td>
<td>&gt; 80</td>
<td>&lt; 22</td>
<td>&lt; 5 %</td>
<td>IK02</td>
</tr>
</tbody>
</table>

¹ t [h]: L70/B50 @ 25 °C (T₁)/t [h]: L85/B10 @ 25 °C (T₂) | SUPERIOR CLASS | PERFORMANCE CLASS | VALUE CLASS
COMPATIBILITY OF PANEL ACCESSORIES WITH PANEL FAMILIES

1. SURFACE MOUNT KIT
   - Pre-assembled ready to install
   - Simple fixing with magnets
   - Cross brace for greater stability
   - Material: aluminum

2. SURFACE MOUNT KIT VALUE
   - Kit for tool-free mounting with corner clips
   - Material: aluminum

3. EMERGENCY CONVERSION BOX
   - Conversion of a selection of panels to safety luminaires
   - Reduces warehousing complexity
   - Plug-and-play system for easy installation

4. SUSPENSION KIT
   - Suspension length: 1500 mm
   - Material: steel

5. RECESSED MOUNT CLIPS
   - Ceiling thickness: 10 to 20 mm
   - Material: steel

6. RECESSED MOUNT FRAME
   - Pre-assembled ready to install
   - Seamless recessed mounting
   - Ceiling thickness: 8 to 30 mm
   - Material: aluminum
## Technical product details for panel accessories found on next page
PANEL ACCESSORIES

Mounting accessories for panel luminaires, combination according to the accessories matrix

- Suspension Kit:
  suspension length 1.5 m adjustable for various applications by screw connection

- Surface Mount Kit:
  sturdy, cross-stiffened aluminum frame with magnetic corners

- Surface Mount Kit Value:
  Aluminum frame with polycarbonate strip. With rectangular frame, panel insertion is possible from short or long frame side.

- Recessed Mount Clips Value 1 × 4:
  ceiling thickness 10–20 mm, plasterboard, wood and metal ceilings
<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>L x W x H [mm]</th>
<th>Color</th>
<th>Width</th>
<th>Depth</th>
<th>Height</th>
<th>Qty</th>
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<tr>
<td>PANEL 600 SURFACE MOUNT KIT H75</td>
<td>4058071472914</td>
<td>601 x 601 x 75</td>
<td>Aluminum</td>
<td>White</td>
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<td>1</td>
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<td>PANEL 625 SURFACE MOUNT KIT H75</td>
<td>4058071472938</td>
<td>626 x 626 x 75</td>
<td>Aluminum</td>
<td>White</td>
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<td>PANEL 1200 Surface Mount Kit</td>
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<td>1201 x 301 x 56</td>
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<td>PANEL 1200x1000 SURFACE MOUNT KIT VAL</td>
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<td>1212 x 312 x 52</td>
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<td>White</td>
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<td>PANEL 600 SURFACE MOUNT KIT H70 VAL</td>
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<td>White</td>
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<td>3</td>
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<td>30 x –</td>
<td>Steel</td>
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<td>PANEL 600 RECESSED MOUNT FRAME</td>
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<td>650 x 650 x 76</td>
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<td>4058071472976</td>
<td>1224 x 324 x 76</td>
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<td>PANEL RECESSED MOUNT CLIPS VAL 4x</td>
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<td>EM CONVERSION BOX</td>
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<td>9</td>
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</table>
PANEL DIRECT/INDIRECT 1200 UGR<19 ZIGBEE

Suspended edge-lit luminaires for direct and indirect light emission, low glare, 1200 mm with Zigbee 3.0 technology

PRODUCT FEATURES

- IoT-ready luminaire with Zigbee 3.0 technology
- Rectangular (1200 mm x 300 mm) stand-alone luminaires with direct (70%) and indirect (30%) light emission
- Driver integrated into the remote driver box
- UGR 19 according to EN12464-1
- High luminous efficacy: up to 110 lm/W

PRODUCT BENEFITS

- Suitable luminaire for VIVARES and other Zigbee 3.0 Light Management Systems
- Suspended edge-lit luminaires for direct light emission (70%) and indirect light emission (30%)
- Attractive and functional design for office applications
- Good glare reduction (UGR ≤ 19)
- Very homogenous light

AREAS OF APPLICATION

- Efficient replacement for traditional T8 and T5 luminaires
- Offices
- Meeting rooms
- Conference rooms
- Reception areas and foyers

EQUIPMENT / ACCESSORIES

- Suspension kit included

FURTHER PRODUCT DETAILS

1 Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
**PANEL DIRECT/INDIRECT 1200 UGR<19 ZIGBEE**

Suspended edge-lit luminaires for direct and indirect light emission, low glare, 1200 mm with Zigbee 3.0 technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
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<th>L80</th>
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<th>Product name</th>
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<th>Ø x H [mm]</th>
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<td>≥ 80</td>
<td>&lt; 19</td>
<td>&lt; 10 %</td>
<td>IK03</td>
<td>1200 x 300 x 16</td>
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</table>
LINEAR INDIVILED® DIRECT ZIGBEE
Surface mounted luminaire for single luminaire or light line application with Zigbee 3.0 technology

PRODUCT FEATURES
- IoT-ready luminaire with Zigbee 3.0 technology
- Each LED with individual lens and reflector for UGR < 16 and homogenous light distribution
- Pendant mounting with suspension kit
- Linkable to an esthetic seamless light line with line connection adapter (surface or pendant mounting)
- Available with length of 1 200 or 1 500 mm

PRODUCT BENEFITS
- Suitable luminaire for VIVARES and other Zigbee 3.0 Light Management Systems
- Homogenous light distribution and reduced glare thanks to the IndiviLED® optics
- Multiple mounting options
- The product family offers full lighting solution for different applications
- Energy savings of up to 50 % compared to T5 batten luminaires

AREAS OF APPLICATION
- Direct replacement for luminaires with fluorescent lamps
- Offices, schools
- General indoor illumination
- Corridors, entrance areas
- Seamless linear lighting

EQUIPMENT / ACCESSORIES
- Suspension kit available
- Line connection adapter available
- Through-wiring cable kit available

FURTHER PRODUCT DETAILS

LN INDV D 1500 48W4000K ZBVR

¹ Refer to www.ledvance.com/guarantee for precise conditions
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**LINEAR INDIVILED® DIRECT ZIGBEE**

Surface mounted luminaire for single luminaire or light line application with Zigbee 3.0 technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
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<th>L80</th>
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<td>4058075521902</td>
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<td>4200</td>
<td>125</td>
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<td>62000</td>
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<tr>
<td>LN INDV D 1520 ZIGBEE 48W 4000 K</td>
<td>■</td>
<td>4058075521926</td>
<td>2 x 48W FL</td>
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<td>5700</td>
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<td>62000</td>
<td>50000</td>
<td>70</td>
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1 t [h]: L70/B50 @ 25°C (T0)/t [h]: L80/B10 @ 25°C (T0)

- SUPERIOR CLASS
- PERFORMANCE CLASS
- VALUE CLASS
LINEAR INDIVILED® DIRECT ACCESSORIES
Mounting accessories for LINEAR INDIVILED® luminaires

— Suspension Kit:
  1 × transparent 1.5 m cable 3 × 0.75 mm
  2 × Y wire suspension 1.5 m
— Suspension Wire:
  1 × Y wire suspension 1.5 m

— Through Wiring Kit:
  3 × 1.5 mm with fast connector

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>L x W x H [mm]</th>
<th>Color</th>
<th>Material</th>
<th>Color</th>
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<td>4058075133277</td>
<td>1560 x 1 x 1</td>
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<td>Steel</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>LN INDV Lightline Connector</td>
<td>4058075133341</td>
<td>82 x 40 x 12</td>
<td>Steel</td>
<td>Steel</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LN INDV 1200 Through Wiring Kit</td>
<td>4058075158030</td>
<td>1250 x 20 x 7</td>
<td>Polycarbonate (PC)</td>
<td>Yellow</td>
<td>1</td>
<td>4</td>
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<td>LN INDV 1500 Through Wiring Kit</td>
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<td>1560 x 20 x 7</td>
<td>Polycarbonate (PC)</td>
<td>Yellow</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

1 Refer to www.ledvance.com/guarantee for precise conditions
OUR CHECKLIST FOR YOUR LINEAR INDIVILED DIRECT ZIGBEE SYSTEM

Typical installation: We have put together for you all the necessary components for suspended installation of three luminaires as strip lighting. For more information see the operating instructions for Linear IndiviLED.

INSTALLATION OF 3 × LINEAR INDIVILED DIRECT ZIGBEE

ORDER LIST
- 3 × Linear IndiviLED Direct Zigbee
- 3 × Throughwiring Kit
- 2 × Lightline Connector
- 1 × Suspension Kit
- 2 × Suspension Wire

The through-wiring must be fitted by an installer.
DOWNLIGHT UGR19 ZIGBEE

Low-glare downlights, suitable for computer screen workplaces with Zigbee 3.0 technology

PRODUCT FEATURES
- IoT-ready luminaire with Zigbee 3.0 technology
- Housing material: Aluminum mirror-finished reflector
- Type of protection: IP54 (room side) / IP20 (back side)
- Connector box with push wire terminal for tool-free connection
- Through-wiring possible

PRODUCT BENEFITS
- Suitable luminaire for VIVARES and other Zigbee 3.0 Light Management Systems
- Good glare reduction (UGR < 19) and cut off angle up to 30° for comfortable indoor lighting
- Easy and quick installation thanks to connector box with 5-pole toolless terminal
- Low-flicker light
- Suitable for use in dusty and damp locations thanks to high IP rating

AREAS OF APPLICATION
- Suitable for office applications, especially for computer screen workplaces
- Direct replacement for luminaires with compact fluorescent lamps
- Entrances/Hallways
- Bathrooms, kitchens and sheltered outdoor areas
- General illumination

EQUIPMENT / ACCESSORIES
- External control gear included

FURTHER PRODUCT DETAILS

DL UGR19 DN195 PFM 21W840 ZBVR WT

¹ Refer to www.ledvance.com/guarantee for precise conditions

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**DOWNLIGHT UGR19 ZIGBEE**
Low-glare downlights, suitable for computer screen workstations with Zigbee 3.0 technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
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<th>lm</th>
<th>K</th>
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<th>L80</th>
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<td>DL UGR19 PFM DN155 14W 840 ZBVR WT</td>
<td>1 × 26 W CFLi</td>
<td>4058075459892</td>
<td>14</td>
<td>1600</td>
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<td>60000</td>
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<th>L × W × H [mm]</th>
<th>∅ × H [mm]</th>
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<td>&gt; 80</td>
<td>&lt; 19</td>
<td>&lt; 10 %</td>
<td>Ø30</td>
</tr>
<tr>
<td>DL UGR19 PFM DN155 21W 840 ZBVR WT</td>
<td>&gt; 80</td>
<td>&lt; 19</td>
<td>&lt; 10 %</td>
<td>Ø30</td>
</tr>
</tbody>
</table>

1 t [h]: L70/B50 @ 25 °C (T) / t [h]: L80/B10 @ 25 °C (T)
LEDVANCE HUMAN CENTRIC LIGHTING
FOCUSING ON PEOPLE
IN LIGHTING DESIGN

LIGHT IS ONE OF THE MOST IMPORTANT SOURCES FOR OUR HEALTH, PERFORMANCE AND SATISFACTION.

Offices with little natural light, dark meeting rooms and artificial light until late into the night – these are typical modern working conditions. But as one of the most important sources for our well-being, performance and satisfaction, light is essential.

A lack of daylight can cause serious disruption to our day/night rhythm (our “inner clock”), and massive degradation in our performance and overall well-being. Human centric lighting (HCL) is closely linked to this biological effect of light. Lighting solutions for modern working environments must be designed to promote creative thinking and high levels of concentration at desks, in service sectors and in factories.

Human centric lighting focuses on people and their need for natural light. Flexible, stimulating and effective. It creates a working environment that simulates the changes in natural daylight with its visual, biological and emotional effects. And it can positively support the circadian rhythm of people through changing color temperatures and illumination levels.

THE LEDVANCE BIOLUX HCL SYSTEM

The system consists of two components: the BIOLUX HCL control unit and the luminaires – BIOLUX HCL Downlight and BIOLUX HCL Panel. It always provides the right light at the right time of day. To adapt the system even more to individual needs, there is also a choice of different lighting mood profiles.

The LEDVANCE BIOLUX HCL system is also a winner of design, function and innovation awards.

CIRCADIAN RHYTHM – THE BODY’S 24-HOUR CYCLE

- In the evening without any light stimulus the body produces melatonin (sleep hormone) – we get tired;
- As morning comes our melatonin level drops and the “stress hormone” cortisol programs the body for daytime activity

If we receive too little light during the day, our melatonin level falls too low. As a result, we do not sleep well at night, and we are sluggish, tired and listless during the day.

A PERFECT COMBINATION: LEDVANCE BIOLUX HCL AND VIVARES ZIGBEE

The HCL light curve of the LEDVANCE BIOLUX HCL system can be easily combined with VIVARES Zigbee. Find out more on the following pages.
A BENEFICIAL CONNECTION: VIVARES ZIGBEE AND LEDVANCE BIOLUX HCL

WITH THE COMBINATION OF VIVARES ZIGBEE AND BIOLUX HCL, YOU CAN OFFER YOUR CUSTOMERS TWICE THE ADDED VALUE.

VIVARES Zigbee and BIOLUX HCL combine the benefits of a wireless light management system with the health- and performance-enhancing effects of human centric lighting. This combination is also very easy to install and commission.

SINGLE OFFICES AND CONFERENCE ROOMS: BIOLUX HCL

The use of BIOLUX HCL luminaires together with BIOLUX HCL control is ideal for single offices and conference rooms with up to 40 lighting components. In addition to the light curve, which automatically simulates the changes in natural daylight, five preprogrammed light profiles can be selected using the BIOLUX HCL control unit.

OPEN-PLAN OFFICES: VIVARES ZIGBEE HCL

VIVARES Zigbee HCL is the perfect solution for open-plan offices with up to 200 lighting components. In this case, the VIVARES Zigbee control transmits the identical natural light curve to the BIOLUX HCL luminaires. For you and your customers this is a very simple way to share the positive effects of HCL with a large number of people.

HCL HAS A POSITIVE EFFECT – ALSO IN TERMS OF ECONOMY

HCL promotes and supports a company’s most valuable resource: its employees. That is reflected not least in productivity rates.

| + 2 HOURS | + 1 YEAR | – 1 PERCENT |
| Time effectively gained per month | Employee loyalty | Absence/illness |

ALL FROM A SINGLE SOURCE

LEDVANCE offers you all the products you need for a combined VIVARES Zigbee and BIOLUX HCL system from a single source. This means that all the components are perfectly matched to each other and meet the same high quality standards.

Do you need information on our products? Our experts are happy to advise you. Get in touch with us: kundenservice@ledvance.com

CERTIFIED DAYLIGHT CURVE

The independent VDE testing and certification institute certified LEDVANCE BIOLUX HCL with meeting all the requirements of an HCL system.

BIOLUX HCL received top marks (3 out of 3 stars). Among the certified standards is the curve, which simulates the changes in natural daylight in terms of light intensity and color temperature.

Illustration of a daylight curve: HCL follows the natural changes in daylight. This has a positive effect.

This light curve is used in all rooms which means that there are the same lighting conditions everywhere.

COMPARISON: BIOLUX HCL AND VIVARES ZIGBEE HCL IN SINGLE AND OPEN-PLAN OFFICES

<table>
<thead>
<tr>
<th>BIOLUX HCL (Single offices/conference rooms)</th>
<th>VIVARES ZIGBEE HCL (Open-plan offices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of devices</td>
<td>Up to 40</td>
</tr>
<tr>
<td></td>
<td>Up to 200</td>
</tr>
<tr>
<td>Mode</td>
<td>5 light profiles</td>
</tr>
<tr>
<td></td>
<td>1 light profile (NATURAL)</td>
</tr>
<tr>
<td>Adjustment with the BIOLUX HCL control unit</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Commissioning</td>
<td>BIOLUX HCL app</td>
</tr>
<tr>
<td></td>
<td>WAVARES Portal</td>
</tr>
<tr>
<td>Cloud services</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes (available from Q1 2022)</td>
</tr>
<tr>
<td>Motion detection</td>
<td>Yes*</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

* Sensor is wired to luminaire group (Zigbee sensor planned for end of 2021)

Source: http://en.licht.de/
BIOLUX HCL LUMINAIRE

BIOLUX HCL PANEL

- Enables individual HCL lighting solutions in conjunction with the appropriate HCL control
- Biologically optimized lighting by adapting the artificial light to the changes in natural daylight
- Can support concentrated work
- Very good anti-glare properties (UGR < 19)
- Very high color rendering index (R.a > 90)
- Wireless communication between the control unit and luminaires via Zigbee protocol

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>lm</th>
<th>m²/W</th>
<th>K</th>
<th>Ø × H (mm)</th>
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<tr>
<td>BIOLUX HCL PL 625 ZB 43W</td>
<td>4058075364561</td>
<td>43</td>
<td>4 000</td>
<td>95</td>
<td>80</td>
<td>2 700 – 6 500 × 620 × 11</td>
</tr>
<tr>
<td>BIOLUX HCL PL 600 ZB 43W</td>
<td>4058075364547</td>
<td>43</td>
<td>4 000</td>
<td>95</td>
<td>80</td>
<td>2 700 – 6 500 × 595 × 11</td>
</tr>
</tbody>
</table>

BIOLUX HCL DOWNLIGHT

- Enables individual HCL lighting solutions in conjunction with the appropriate HCL control
- Biologically optimized lighting by adapting the artificial light to the changes in natural daylight
- Can support concentrated work
- Very good anti-glare properties (UGR < 19)
- Very high color rendering index (R.a > 90)
- Wireless communication between the control unit and luminaires via Zigbee protocol

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>lm</th>
<th>m²/W</th>
<th>K</th>
<th>Ø × H (mm)</th>
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</thead>
<tbody>
<tr>
<td>BIOLUX HCL DL DN150 ZB 20W TW</td>
<td>4058075400733</td>
<td>20</td>
<td>1 800</td>
<td>90</td>
<td>60</td>
<td>2 700 – 6 500 × 175.4 × 98.9</td>
</tr>
</tbody>
</table>

1 For precise terms and conditions go to www.ledvance.com/guarantee
VIVARES DALI: FUNCTIONALITY, INSTALLATION AND OPERATION

VIVARES DALI IS DALI-2-CERTIFIED AND MEETS ALL THE REQUIREMENTS OF THE LATEST INDUSTRY STANDARD.

At the heart of LEDVANCE VIVARES DALI is the OSRAM DALI PRO 2 IoT control unit. The system connects DALI-2 components – for example sensors, pushbutton couplers and the LEDVANCE VIVARES DALI-2 luminaires. As an open standard, the system is compatible with a wide range of DALI-2-ready luminaires and components. A total of up to 128 luminaires and 126 input devices can be individually addressed via two channels. Installation, configuration and commissioning are particularly simple and user-friendly thanks to the browser-based graphical user interface.

Predefined templates and drag & drop enable time-saving and intuitive commissioning. The DALI PRO 2 IoT control unit is equipped with an integrated gateway and provides optional access to the LEDVANCE Cloud services. The VIVARES DALI system can also be integrated into a higher-ranking KNX system for building control. And it comes with state-of-the-art security features.

VIVARES DALI IN USE

<table>
<thead>
<tr>
<th>Application profiles</th>
<th>LS/PD sensor</th>
<th>P sensor</th>
<th>Function</th>
<th>Setting</th>
<th>Pushbutton coupler</th>
<th>Function</th>
<th>Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-plan offices</td>
<td>✓</td>
<td>✓</td>
<td>Daylight control and motion and presence detection</td>
<td>Adjustable sensor delay and dimming speed, automatic calibration to adapt to the place of installation</td>
<td>✓</td>
<td>ON/OFF/DIM scenes</td>
<td>For each luminaire group with, for example, four desks one sensor is used to control this area.</td>
</tr>
<tr>
<td>Multi-person offices</td>
<td>✓</td>
<td>✓</td>
<td>Daylight control and motion and presence detection</td>
<td>Adjustable sensor delay and dimming speed, automatic calibration to adapt to the place of installation</td>
<td>✓</td>
<td>ON/OFF/DIM scenes</td>
<td>For each luminaire group with, for example, four desks one sensor is used to control this area.</td>
</tr>
<tr>
<td>Standard rooms</td>
<td>–</td>
<td>✓</td>
<td>Motion and presence detection</td>
<td>Adjustable sensor delay and dimming speed</td>
<td>✓</td>
<td>ON/OFF/DIM scenes</td>
<td>For each luminaire group with, for example, four desks one sensor is used to control this area.</td>
</tr>
<tr>
<td>Conference rooms</td>
<td>–</td>
<td>✓</td>
<td>Motion and presence detection</td>
<td>Adjustable sensor delay and dimming speed</td>
<td>✓</td>
<td>ON/OFF/DIM scenes</td>
<td>Depending on the detection range of the sensor. The sensor is usually positioned in such a way that the entrance area and the conference table are detected at the same time. If both are not detected at the same time, install a second sensor.</td>
</tr>
<tr>
<td>Restrooms</td>
<td>–</td>
<td>✓</td>
<td>Motion and presence detection</td>
<td>Adjustable sensor delay and dimming speed</td>
<td>✓</td>
<td>ON/OFF</td>
<td>A separate sensor is fitted for each toilet cubicle. Other than that, cover the entrance areas and common areas (sinks, urinals, etc.).</td>
</tr>
<tr>
<td>Corridors &amp; stairs</td>
<td>–</td>
<td>✓</td>
<td>Motion and presence detection</td>
<td>Adjustable sensor delay and dimming speed</td>
<td>✓</td>
<td>ON/OFF/2step DIM</td>
<td>Long corridors or stairwells</td>
</tr>
<tr>
<td>Reception</td>
<td>–</td>
<td>✓</td>
<td>Motion and presence detection</td>
<td>Adjustable sensor delay and dimming speed</td>
<td>✓</td>
<td>ON/OFF/2step DIM</td>
<td>Reception desk with waiting area</td>
</tr>
</tbody>
</table>

Project size: 2 DALI channels for up to 128 DALI luminaires and components (sensors, couplers).
Installation tools: mobile device (smartphone, notebook or tablet).
WebGui software: The software contains templates for the above-mentioned application profiles. The profiles can be selected here as required. The products are added by drag & drop.

1 LS/PD = light and presence 2 P = presence
Good reasons for choosing VIVARES DALI:

- Tailor-made for new buildings and renovations with the option of additional control lines
- Products certified according to DALI-2 standard
- Extensive product portfolio for office applications
- Project creation and commissioning with self-explanatory software
- Integrated IoT gateway for maintenance and energy consumption reports

Our experts are happy to support you in planning your DALI PRO 2 IoT system. Just get in touch at: kundenservice@ledvance.com

TRAIN HARD, REAP THE REWARD: LEDVANCE TRAINING FOR PROFESSIONALS

LEDVANCE gives you the option of deepening your expertise in light management. You can choose from different courses:

1. Our online training center includes training modules where you can learn all about DALI technology and individual light management components. Visit training.ledvance.com for our online training courses.

2. Our YouTube channel is packed with product training videos, commissioning instructions and more. Check them out at: ledvance.com/dalivideos

Take advantage of this opportunity and gain valuable knowledge that keeps you ahead of the competition.
SIMPLY BETTER LIGHT IN THE OFFICE: CONFIGURE AND COMMISSION VIVARES DALI

Your VIVARES DALI system is configured and commissioned on site after installation of the VIVARES DALI components. You can use the VIVARES DALI commissioning app for this. The free tool is browser-based, so it doesn’t have to be downloaded, and is available for smartphones, tablets (iOS and Android) and PCs. The self-explanatory user guide makes commissioning extremely quick and easy – thanks to predefined rooms and situations via drag & drop. Alternatively, you can use the well-known DALI Professional PC tool.

FROM PROJECT PLANNING TO OPERATION IN 5 STEPS

1. PLAN LIGHTING SYSTEM AND ORDER PRODUCTS
   Find out more about planning VIVARES DALI from page 40.

2. INSTALL
   Install all luminaires, sensors and other components (e.g. pushbutton couplers).

3. CREATE AN ACCOUNT
   – Connect to the WiFi of the DALI controller and open the web-based commissioning app in the browser
   – Create an account, register and log in

4. CONFIGURE AND COMMISSION ON SITE
   – Create a project in the commissioning app
   – Drag & drop predefined templates into the project
   – Automatically find installed luminaires and components through the search function
   – Assign luminaires and components to the respective templates (drag & drop)
   – Synchronize and save to DALI PRO

5. FINALIZE AND OPERATE
   – Test the lighting system
   – Get customer acceptance
   – Optional VIVARES Cloud services: create maintenance and energy consumption reports (find out more from page 6)
**QUICK AND COMFORTABLE: THE COMMISSIONING TOOL**

1. **Welcome to OSRAM DALI PRO 2 IoT Commissioning App**
   - Create an account, register and log in

2. **Create a New Project**
   - Create new project

3. **Manager Area**
   - Drag & drop predefined templates (rooms, situations) into the project

4. **Search Completed**
   - Automatically assign installed luminaires and components to the relevant templates via drag & drop

5. **General Room**
   - Press the sync button, save in DALI PRO – and that’s it!

**REFERENCE PROJECT**

**PROJECT:** SHOW:LAB at LEDVANCE headquarters, Munich/Garching

**TASK:** Replacement of conventional T8 fluorescent tubes and installation of a VIVARES DALI light management system including presence detection and cloud connection

**PRODUCTS:** 3 OSRAM DALI sensors DALI/ LS/ PDCI, 21 LEDVANCE PANELS 625, 21 OSRAM OTI DALI ECGs, one OSRAM DALI PROF PB coupler, one OSRAM DALI PRO2 IoT controller

The LEDVANCE SHOW:LAB is now illuminated by a future-proof DALI-2 light management system with cloud connection. Configuration and commissioning were very quick thanks to the LEDVANCE commissioning tool. The new lighting system offers significant energy savings, lower CO₂ emissions and a longer lifetime for the luminaires. The cloud services enable convenient, location-independent energy monitoring and predictive diagnosis of the system.
DALI PRO 2 IOT

DALI-2 controller with integrated gateway for small size light management systems up to 128 light points

PRODUCT FEATURES
— DALI-certified
— Feature-rich local LMS based on DALI Professional
— IoT ready with built-in gateway for remote data access
— Existing DALI Pro PC Software compatible
— Easy browser-based commissioning UI and Professional Software available

PRODUCT BENEFITS
— DALI-2 standard meets many tender requirements
— Profile based commissioning on jobsite
— Building Management Systems integration possible (e.g. KNX interface)
— Central control functions & individual light control via KNX possible

AREAS OF APPLICATION
— Room control, floor control, daylight-dependent control
— Connection of light and presence sensors in DALI systems
— Offices: Individual and group workplaces
— Production and assembly facilities

EQUIPMENT / ACCESSORIES
— Easy browser-based commissioning UI (for smart devices)

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₑ</th>
<th>Hz</th>
<th>T₀</th>
<th>L × W × H [mm]</th>
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</thead>
<tbody>
<tr>
<td>DALI PRO 2 IOT</td>
<td>4062772114189²</td>
<td>220…240</td>
<td>50/60</td>
<td>0…+40°C</td>
<td>91 × 106 × 62</td>
</tr>
</tbody>
</table>

1 Refer to www.ledvance.com/guarantee for precise conditions
2 New EAN 4052899627079 from October 2021 with additional LEDVANCE specific features
DALI SENSOR LS/PD CI G2
DALI-2 light and presence sensor, ceiling integration

PRODUCT FEATURES
- Light and presence sensor for ceiling integration
- Presence detection via passive IR element
- Light sensor operating range: 20…800 lx (measured at sensor)
- Mounting height: 2…5 m
- Function indicator with two-color LED

PRODUCT BENEFITS
- Flat design, very small structural height
- Simple and fast installation via wire springs
- DALI-2 certified
- DALI Bus powered (no mains connection necessary)
- Multiple sensors connectable to the same DALI line

AREAS OF APPLICATION
- Suitable for indoor applications
- Individual offices
- Open-plan offices
- Classrooms
- Conference rooms

EQUIPMENT / ACCESSORIES
- Suitable for many OSRAM DALI control systems

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₚ</th>
<th>Hz</th>
<th>Lx</th>
<th>H</th>
<th>Tₘ</th>
<th>Tₑ</th>
<th>Color</th>
<th>L x W x H (mm)</th>
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</thead>
<tbody>
<tr>
<td>DALI SENSOR LS/PD CI G2</td>
<td>408217072083</td>
<td>16</td>
<td>0</td>
<td>6 m</td>
<td>20…800</td>
<td>5</td>
<td>-20…+50 °C</td>
<td>Ceiling integration</td>
<td>White</td>
</tr>
</tbody>
</table>

1 Refer to www.ledvance.com/guarantee for precise conditions.

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
DALI SENSOR LS/PD LI UF G2
Ultraflat DALI-2 light and presence sensor, luminaire installation

PRODUCT FEATURES
- Light and presence sensor for luminaire installation
- Presence detection via passive IR element
- Light sensor working range: 10…1000 lx (measured at sensor)
- Mounting height: 2…4 m
- Function indication via integrated LED

PRODUCT BENEFITS
- Extremely low profile
- Presence detection range can be restricted by snap on shutters
- DALI-2 certified
- DALI Bus powered (No mains connection necessary)
- Multiple sensors connectable to the same DALI line

AREAS OF APPLICATION
- Suitable for indoor applications
- Installation in office luminaires
- Suitable for floor standing luminaires in combination with an application controller

FURTHER PRODUCT DETAILS

Detection area of the sensor in meter

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>Presence</th>
<th>Motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>3.0</td>
<td>4.0</td>
</tr>
<tr>
<td>2.5</td>
<td>3.7</td>
<td>5.0</td>
</tr>
<tr>
<td>3.0</td>
<td>4.4</td>
<td>6.0</td>
</tr>
<tr>
<td>4.0</td>
<td>-</td>
<td>6.5</td>
</tr>
</tbody>
</table>

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₜ</th>
<th>Hz</th>
<th>L x W x H [mm]</th>
<th>Ta</th>
<th>Luminaire integration</th>
<th>Colo.</th>
<th>L x W x H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALI SENSOR LS/PD LI UF G2</td>
<td>4062170072045</td>
<td>16</td>
<td>0</td>
<td>0…1000</td>
<td>4</td>
<td>-20…+50 °C</td>
<td>White</td>
<td>50 x 21 x 16</td>
</tr>
</tbody>
</table>

³ Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
DALI SENSOR LS/PD LI G2

DALI-2 light and presence sensor, luminaire installation

PRODUCT FEATURES
- Light and presence sensor for luminaire installation
- Presence detection via passive IR element
- Light sensor operating range: 20...800 lx (measured at sensor)
- Mounting height: 2...5 m
- Function indicator with two-color LED

PRODUCT BENEFITS
- Small housing design
- Frames for different mounting types for luminaires
- DALI-2 certified
- DALI Bus powered (No mains connection necessary)
- Multiple sensors connectable to the same DALI line

AREAS OF APPLICATION
- Suitable for indoor applications
- Installation in office luminaires
- Suitable for floor standing luminaires in combination with an application controller
- Ceiling installation via LS/PD CI KIT or LS/PD AP KIT possible

EQUIPMENT / ACCESSORIES
- Attachable mounting frame for luminaire mounting from inside and outside

FURTHER PRODUCT DETAILS
Detection area of the sensor in meter

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>Presence</th>
<th>Motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>2.5</td>
<td>4.5</td>
</tr>
<tr>
<td>2.5</td>
<td>3.3</td>
<td>5.3</td>
</tr>
<tr>
<td>3.0</td>
<td>4.0</td>
<td>6.0</td>
</tr>
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<td>4.0</td>
<td>5.0</td>
<td>7.0</td>
</tr>
<tr>
<td>5.0</td>
<td>6.0</td>
<td>7.0</td>
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</table>

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
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<th>Lx</th>
<th>Lm</th>
<th>Tm</th>
<th>Ta</th>
<th>L x W x H(mm)</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALI SENSOR LS/PD LI G2</td>
<td>406217072969</td>
<td>16</td>
<td>0</td>
<td>80°</td>
<td>6 m</td>
<td>20...800</td>
<td>5 -20...+50°C</td>
<td>Ceiling integration/ Luminaire integration</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
HF LS LI

Light and presence sensor, radar, luminaire installation, up to 13 m height

PRODUCT FEATURES
- Light and presence sensor for luminaire installation or attachment
- Presence detection via active radar sensor element
- Function indicator with two-color LED
- Motion detection range adjustable
- Mounting height: 2…13 m

PRODUCT BENEFITS
- Individual activation/deactivation of light and presence sensor via remote control
- V(λ) corrected light sensor element

AREAS OF APPLICATION
- Installation in IP protected luminaires possible
- Corridor lighting control in logistic centers and factory halls
- Areas with high ceilings

EQUIPMENT / ACCESSORIES
- Suitable for DALIeco Control unit
- Suitable for DALI Sensor Coupler HF LS LI

FURTHER PRODUCT DETAILS

Detection area of the sensor in meter

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>Presence</th>
<th>Motion</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>–</td>
<td>6.7</td>
<td>6.7</td>
</tr>
<tr>
<td>6.0</td>
<td>–</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>8.0</td>
<td>–</td>
<td>13.4</td>
<td>13.4</td>
</tr>
<tr>
<td>10.0</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

FITTING COMPONENTS

DALI COUPLER
HF G2
4062172072199
DALI-2 sensor coupler for integration of HF (radar) light and presence sensor in DALI installations

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₐ</th>
<th>Hz</th>
<th>Lₓ</th>
<th>Ta</th>
<th>L x W x H (mm)</th>
<th>Ø x H (mm)</th>
<th>Color</th>
<th>Luminaire attachment/ Luminare Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF LS LI</td>
<td>4052899921481</td>
<td>6</td>
<td>0</td>
<td>35°...80°</td>
<td>20…800</td>
<td>8 \ -20…+50°C</td>
<td>56 x 28 x 21</td>
<td>White</td>
<td></td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
DALI COUPLER HF G2

DALI-2 sensor coupler for integration of HF (radar) light and presence sensor in DALI installations

**Product Features**
- Coupler for integration of light and presence information in DALI installations
- 4p4c-connector for HF LS LI Sensor (Light- and motion detection via radar)
- Very low DALI Power consumption
- For sensor features see HF LS LI sensor

**Product Benefits**
- DALI-2 certified
- Multiple couplers connectable to the same DALI line
- Integratable in light- and building management systems supporting DALI-2 sensors

**Areas of Application**
- Connection of light and presence sensors in DALI systems
- Ceiling or independent installation via ECO CI KIT possible

**Equipment / Accessories**
- HF LS LI – Light and presence Sensor head with HF technology (radar)
- Separate installation possible with ECO CI KIT

**Fitting Components**

HF LS LI
4052899921481
Light and presence sensor

**Technical Data**

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₕ</th>
<th>Hz</th>
<th>Tₜ</th>
<th>COLOR</th>
<th>L × W × H [mm]</th>
<th>Ø × H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALI COUPLER HF G2</td>
<td>4062172072199</td>
<td>220...240</td>
<td>50/60</td>
<td>-20...+50 °C</td>
<td>Light grey</td>
<td>118 × 30 × 21</td>
<td></td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions
LS/PD MULTI 3 CI
Light and presence sensor, recessed ceiling, moveable

PRODUCT FEATURES
- Ceiling installation sensor with moveable sensor head
- Connection via four-pole screw terminal or modular 4c4p-connector

PRODUCT BENEFITS
- Particularly small construction

AREAS OF APPLICATION
- Offices
- Corridors
- Classrooms
- Training rooms
- Stairways

EQUIPMENT / ACCESSORIES
- Surface mounting in connection with SENSOR KIT
- Suitable for MULTieco, DIM MULTieco, DALI MULTieco control unit
- Suitable for DALI Professional Sensor Coupler

FURTHER PRODUCT DETAILS

Detection area of the sensor in meter

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>Presence</th>
<th>Motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>2.5</td>
<td>4.5</td>
</tr>
<tr>
<td>3.0</td>
<td>3.3</td>
<td>5.3</td>
</tr>
<tr>
<td>4.0</td>
<td>4.0</td>
<td>6.0</td>
</tr>
<tr>
<td>5.0</td>
<td>5.0</td>
<td>7.0</td>
</tr>
</tbody>
</table>

FITTING COMPONENTS

DALI COUPLER
MULTI3 G2
4062172072113
DALI-2 sensor coupler to integrate MULTI 3 light and presence sensor into DALI installations

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>L × W × H [mm]</th>
<th>∅ x II [mm]</th>
<th>T_a</th>
<th>TH</th>
<th>THa</th>
<th>L = 4W + H [mm]</th>
<th>COLOR</th>
<th>L X W X H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS/PD MULTI 3 CI</td>
<td>406321916648</td>
<td>50 × 25</td>
<td>50 × 25</td>
<td>20</td>
<td>30</td>
<td>30</td>
<td>20…600</td>
<td>White</td>
<td>50 x 25</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
DALI COUPLER MULTI3 G2
DALI-2 sensor coupler to integrate MULTI 3 light and presence sensor into DALI installations

PRODUCT FEATURES
- Coupler for integration of light and presence information in DALI installations
- 4p4c-connector for HF LS LI Sensor (Light- and motion detection via radar)
- Very low DALI Power consumption
- For sensor features see HF LS LI sensor

PRODUCT BENEFITS
- DALI-2 certified
- Multiple couplers connectable to the same DALI line
- Integreatable in light- and building management systems supporting DALI-2 sensors

AREAS OF APPLICATION
- Connection of light and presence sensors in DALI systems
- Ceiling or independent installation via ECO CI KIT possible

EQUIPMENT / ACCESSORIES
- Multi-3 CI Sensor - Light and presence Sensor with PIR detection technology
- Separate installation possible with ECO CI KIT

FITTING COMPONENTS
LS/PD MULTI 3 CI
4008321916648
Light and presence sensor

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₐ</th>
<th>Hz</th>
<th>Tₐ</th>
<th>L × W × H [mm]</th>
<th>Ø × H [mm]</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALI COUPLER MULTI3 G2</td>
<td>4062172072113</td>
<td>16</td>
<td>0</td>
<td>−20...+50°C</td>
<td>Ceiling integration/ Luminaire integration</td>
<td>Light grey</td>
<td>118 × 30 × 21</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions
DALI COUPLER E G2
DALI-2 sensor coupler for integration of light and presence information in DALI installations

PRODUCT FEATURES
- Coupler for integration of light and presence information in DALI installations
- Switching input for motion detector (potential free)
- Analog input (0–10 V) for light sensor

PRODUCT BENEFITS
- DALI-2 certified
- Output for presence detection feedback LEDs
- 24 V DC output for power supply of external sensors

AREAS OF APPLICATION
- Installation in industry and office luminaires
- Suitable for luminaire integration
- Corridors
- Warehouses

EQUIPMENT / ACCESSORIES
- Ceiling or independent installation via ECO CI KIT possible
- Suitable for external light and presence sensors

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₐm</th>
<th>Hz</th>
<th>Ta</th>
<th>L x W x H [mm]</th>
<th>Ø x H [mm]</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALI COUPLER E G2</td>
<td>4062170722122</td>
<td>220–240</td>
<td>50/60</td>
<td>-20...+50 °C</td>
<td>Ceiling integration / Luminaire integration</td>
<td>Light grey</td>
<td>118 x 30 x 21</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions
DALI COUPLER LS HIGHTBAY G2
DALI-2 sensor coupler with integrated light sensor for HIGHTBAY sensor

PRODUCT FEATURES
- Coupler for integration of light and presence information in DALI installations
- Integrated light sensor
- Adapter for integration of High Bay or Vision Sensor for motion detection
- For sensor features see HF LS LI sensor
- 4p4c-connector for HF LS LI Sensor
  (Light- and motion detection via radar)

PRODUCT BENEFITS
- DALI-2 certified
- Adaptable light sensor sensitivity for different mounting height
- Extended terminal section enables mains looping
- Flexible addressing via DALI-2
- Multiple couplers connectable to the same DALI line

AREAS OF APPLICATION
- Industry
- Production halls
- Sports halls
- Logistic centers
- Areas with high ceilings

EQUIPMENT / ACCESSORIES
- High Bay Sensor for big installation heights
- Vision Sensor for wide detection range

FITTING COMPONENTS

HIGH BAY
4006321410078
Movement sensor

VISION
4006321957047
Movement sensor

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₘ</th>
<th>Hz</th>
<th>Lₓ</th>
<th>Tₑₘ</th>
<th>Tₛ</th>
<th>L x W x H [mm]</th>
<th>Ø x H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALI COUPLER LS HIGHTBAY G2</td>
<td>40062172072137</td>
<td>16</td>
<td>0</td>
<td>20…100</td>
<td>13</td>
<td>20…+50°C</td>
<td>On-top ceiling mounting</td>
<td>White 139 x 118 x 37</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions
**HIGH BAY**

Motion sensor with switching contact for up to 13 m height, optional use with DALI HIGHBAY ADAPTER

---

**PRODUCT FEATURES**

- Motion sensor with switching contact
- 3 to 10 m: detection of motion by people
- 3 to 13 m: detection of vehicle movement (e.g. fork lift truck)
- Adjustable switch-off delay: 30 s to 20 min
- Maximum power consumption in stand-by mode: 0.25 W

**PRODUCT BENEFITS**

- Energy savings up to 35 % (compared to manual switching)

**AREAS OF APPLICATION**

- Great installation height
- Industry
- Production halls

**EQUIPMENT / ACCESSORIES**

- Suitable for up to 15 electronic control gears

---

**FURTHER PRODUCT DETAILS**

Detection area of the sensor in meter

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>4.0</th>
<th>6.0</th>
<th>8.0</th>
<th>10.0</th>
<th>13.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Motion</td>
<td>10.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>-</td>
</tr>
<tr>
<td>Vehicles</td>
<td>10.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

---

**FITTING COMPONENTS**

DALI COUPLER LS HIGHBAY G2
4062172072137
DALI-2 sensor coupler with integrated light sensor

---

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>( V_n )</th>
<th>Hz</th>
<th>( h_m )</th>
<th>( T_A )</th>
<th>Col.</th>
<th>L × W × H [mm]</th>
<th>Ø × H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH BAY</td>
<td>400632410078</td>
<td>120...277</td>
<td>50...60</td>
<td>100°</td>
<td>18 m</td>
<td>13</td>
<td>-10...+70 °C</td>
<td>On-top ceiling mounting</td>
</tr>
</tbody>
</table>

---

1 Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
### PRODUCT FEATURES
- Motion sensor with switching contact
- Adjustable switch-off delay: 30 s to 20 min
- Maximum power consumption in stand-by mode: 0.25 W

### PRODUCT BENEFITS
- Energy savings up to 35 % (compared to manual switching)

### AREAS OF APPLICATION
- Large areas
- Open-plan offices, corridors and storage rooms

### EQUIPMENT / ACCESSORIES
- Suitable for up to 15 electronic control gears

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>V_e</th>
<th>Hz</th>
<th>In</th>
<th>T_a</th>
<th>L × W × H</th>
<th>Ø × H</th>
<th>Detection area of the sensor in meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISION</td>
<td>4006321957047</td>
<td>120...277</td>
<td>50...60</td>
<td>140°</td>
<td>21 m</td>
<td>4.5</td>
<td>-10…+70°C</td>
<td>2.5 x 12.5</td>
</tr>
</tbody>
</table>

1 Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
DALI COUPLER PB G2

DALI-2 pushbutton coupler to integrate standard switches in DALI systems

PRODUCT FEATURES
- DALI pushbutton coupler
- 4 floating inputs

PRODUCT BENEFITS
- Standard pushbuttons/switches can be used
- DALI-2 certified
- DALI Bus powered (No mains connection necessary)
- Multiple couplers connectable to the same DALI line

AREAS OF APPLICATION
- Suitable for installation in flush-type boxes
- Individual offices
- Classrooms
- Conference rooms
- Production and assembly facilities

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>Vₐ [V]</th>
<th>Hz</th>
<th>Ta [-20...+50°C]</th>
<th>L x W x H [mm]</th>
<th>Ø x H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALI COUPLER PB G2</td>
<td>4062177087575</td>
<td>16</td>
<td>0</td>
<td></td>
<td>4</td>
<td>43 x 43 x 21</td>
</tr>
</tbody>
</table>

¹ Refer to www.ledvance.com/guarantee for precise conditions

Products of OSRAM GmbH, distributed by LEDVANCE.
KNX

KNX interface for bi-directional communication between KNX system and DALI network

PRODUCT FEATURES

— Fully configured with the ETS Software and handles up to 250 group objects
— Powered via KNX Bus, no dedicated power supply necessary
— KNX programming interface according to KNXnet/IP specification
— LEDs show different work modes and communication errors on LAN and KNX Bus
— Buttons for diagnose functionality

PRODUCT BENEFITS

— Bi-directional communication between KNX and compatible OSRAM LMS und sensors
— In combination with DALI Professional, app control additionally to KNX possible
— With DALI Professional, DALI sensor information in KNX is available
— In combination with DALI Professional HCL, RGB solutions in KNX possible

AREAS OF APPLICATION

— Industry with heavy duty light regulation even in high bay areas
— Office with high end HCL functionality
— Representative areas with multi-color effects and Tunable White
— Shop and retail with colored and Tunable White lighting
— Healthcare and hospitality with HCL functionality

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>L × W × H [mm]</th>
<th>L × W × H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNX I 250</td>
<td>400217020008</td>
<td>-5...+45 °C Din Rail</td>
<td>90 × 18 × 62</td>
</tr>
</tbody>
</table>

1 Refer to www.ledvance.com/guarantee for precise conditions
**Panel IndiviLED® DALI**

Square recessed luminaire with IndiviLED® optics, with DALI-2 IoT technology

---

**Product Features**
- Metal housing, lenses and reflectors made of polycarbonate (PC)
- Each LED with individual lens and reflector for UGR ≤ 16 and homogenous light distribution
- Lifetime (L80/B10): up to 60,000 h (at 25°C)
- Initial color consistency: 3 SDCM
- Accessories available for various recessed and surface-mounted options

**Product Benefits**
- Homogenous light distribution and reduced glare thanks to the IndiviLED® optics
- Low-flicker light
- Robust structure with IK08
- 5 years guarantee

**Areas of Application**
- Direct replacement for luminaires with fluorescent lamps
- Corridors
- Offices
- Conference rooms
- Reception areas

**Equipment / Accessories**
- Accessories for several mounting options available*
- Security rope for luminaire included
- External control gear included

---

*Please note: available = available as an optional accessory.

¹ Refer to www.ledvance.com/guarantee for precise conditions.

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
# PANEL INDIVLED® DALI

Square recessed luminaire with IndiviLED® optics, with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>Im</th>
<th>K</th>
<th>L70</th>
<th>L80</th>
</tr>
</thead>
<tbody>
<tr>
<td>PANEL INDV 600 33W 3000 K</td>
<td>4058077503885</td>
<td>4 x 18W/4 x 14W FL</td>
<td>33</td>
<td>3800</td>
<td>115</td>
<td>3000</td>
<td>80000</td>
</tr>
<tr>
<td>PANEL INDV 600 33W 4000 K</td>
<td>4058077503861</td>
<td>4 x 18W/4 x 14W FL</td>
<td>33</td>
<td>4000</td>
<td>120</td>
<td>4000</td>
<td>80000</td>
</tr>
<tr>
<td>PANEL INDV 625 DALI 33W 4000 K</td>
<td>4058077503822</td>
<td>4 x 18W/4 x 14W FL</td>
<td>33</td>
<td>4000</td>
<td>120</td>
<td>4000</td>
<td>80000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product name</th>
<th>CRI</th>
<th>UGR</th>
<th>Flicker</th>
<th>IK</th>
<th>L x W x H [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PANEL INDV 600 33W 3000 K</td>
<td>≥ 80</td>
<td>&lt; 16</td>
<td>&lt; 5 %</td>
<td>IK08</td>
<td>595 x 595 x 13</td>
</tr>
<tr>
<td>PANEL INDV 600 33W 4000 K</td>
<td>≥ 80</td>
<td>&lt; 16</td>
<td>&lt; 5 %</td>
<td>IK08</td>
<td>595 x 595 x 13</td>
</tr>
<tr>
<td>PANEL INDV 625 DALI 33W 4000 K</td>
<td>≥ 80</td>
<td>&lt; 16</td>
<td>&lt; 5 %</td>
<td>IK08</td>
<td>620 x 620 x 13</td>
</tr>
</tbody>
</table>

1 t [h]: L70/B50 @ 25 °C (Tf) / t [h]: L80/B10 @ 25 °C (Tf)  
- **SUPERIOR CLASS**  
- **PERFORMANCE CLASS**  
- **VALUE CLASS**
PANEL PERFORMANCE UGR<19 DALI

Square recessed panel luminaires, tool-free installation and low glare, for ceiling systems with DALI-2 IoT technology

PRODUCT FEATURES
- Extruded aluminium frame, Polystyrene diffuser
- Lifetime (L80/B10): up to 60 000 h (at 25 °C)
- High luminous efficacy: up to 120 lm/W
- 5-pole terminal block, cable cross section up to 5 × 2.5 mm²

PRODUCT BENEFITS
- Comfortable light and high color consistency SDCM 3
- Through-wiring possible up to 2.5 qmm with included connector box
- Low-flicker light thanks to special electronic control gear
- Energy savings thanks to high system efficacy of up to 120 lm/w
- 5 years guarantee

AREAS OF APPLICATION
- Direct replacement for luminaires with fluorescent lamps
- Offices, conference rooms
- Reception areas, foyers, corridors, elevators

EQUIPMENT / ACCESSORIES
- Accessories for several mounting options available*
- Connector box with 5-pole terminal included
- Security rope for luminaire included

FURTHER PRODUCT DETAILS

PL PFM 600 DALI 30W3000K UGR19

* Please note: available = available as an optional accessory.
1 Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
## PANEL PERFORMANCE 600 UGR<19 DALI
Square recessed panel luminaires, tool-free installation and low glare, for 600 × 600 mm ceiling systems with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>lm</th>
<th>K</th>
<th>L70</th>
<th>L80</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL PFM 600 UGR&lt;19 DALI 30W 3000 K</td>
<td></td>
<td>4058075336085</td>
<td>4 × 18/W4 × 14/F 30</td>
<td>3 600</td>
<td>120</td>
<td>3 000</td>
<td>100 000</td>
</tr>
<tr>
<td>PL PFM 600 UGR&lt;19 DALI 30W 4000 K</td>
<td></td>
<td>4058075338122</td>
<td>4 × 18/W4 × 14/F 30</td>
<td>3 600</td>
<td>120</td>
<td>4 000</td>
<td>100 000</td>
</tr>
<tr>
<td>PL PFM 600 UGR&lt;19 DALI 36W 940</td>
<td></td>
<td>4058075521988</td>
<td>4 × 18/W4 × 14/F 36</td>
<td>3 750</td>
<td>105</td>
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<tr>
<td>PL PFM 600 UGR&lt;19 DALI 36W 3000 K</td>
<td></td>
<td>4058075440456</td>
<td>4 × 18/W4 × 14/F 36</td>
<td>4 020</td>
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<tr>
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<td></td>
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<td>120</td>
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<td>100 000</td>
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</tbody>
</table>

**Product name**

**CRi** | **UGR** | **L x W x H [mm]**
--- | --- | ---
PL PFM 600 UGR<19 DALI 30W 3000 K | > 80 | < 19 |
PL PFM 600 UGR<19 DALI 30W 4000 K | > 80 | < 19 |
PL PFM 600 UGR<19 DALI 36W 940 | > 80 | < 19 |
PL PFM 600 UGR<19 DALI 36W 3000 K | > 80 | < 19 |
PL PFM 600 UGR<19 DALI 36W 4000 K | > 80 | < 19 |

## PANEL PERFORMANCE 625 UGR<19 DALI
Square recessed panel luminaires, tool-free installation and low glare, for 625 × 625 mm ceiling systems with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>lm</th>
<th>K</th>
<th>L70</th>
<th>L80</th>
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<tr>
<td>PL PFM 625 UGR&lt;19 DALI 30W 3000 K</td>
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<td>4058075338221</td>
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<td>4058075338252</td>
<td>4 × 18/W4 × 14/F 30</td>
<td>3 600</td>
<td>120</td>
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<td>100 000</td>
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<tr>
<td>PL PFM 625 UGR&lt;19 DALI 36W 3000 K</td>
<td></td>
<td>4058075440753</td>
<td>4 × 18/W4 × 14/F 36</td>
<td>4 020</td>
<td>120</td>
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<td>100 000</td>
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<tr>
<td>PL PFM 625 UGR&lt;19 DALI 36W 4000 K</td>
<td></td>
<td>4058075440777</td>
<td>4 × 18/W4 × 14/F 36</td>
<td>4 020</td>
<td>120</td>
<td>4 000</td>
<td>100 000</td>
</tr>
</tbody>
</table>

**Product name**

**CRi** | **UGR** | **L x W x H [mm]**
--- | --- | ---
PL PFM 625 UGR<19 DALI 30W 3000 K | > 80 | < 19 |
PL PFM 625 UGR<19 DALI 30W 4000 K | > 80 | < 19 |
PL PFM 625 UGR<19 DALI 36W 3000 K | > 80 | < 19 |
PL PFM 625 UGR<19 DALI 36W 4000 K | > 80 | < 19 |

## PANEL PERFORMANCE 1200 × 300 UGR<19 DALI
Rectangular recessed panel luminaires, tool-free installation and low glare, for 1200 × 300 mm ceiling systems with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>lm</th>
<th>K</th>
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<tr>
<td>PL PFM 1200X300 UGR&lt;19 DALI 30W/940</td>
<td></td>
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<td>PL PFM 1200X300 UGR&lt;19 DALI 30W 3000 K</td>
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<td>4058075440210</td>
<td>2 × 36/W 30</td>
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<td>4058075440630</td>
<td>2 × 36/W 30</td>
<td>3 600</td>
<td>120</td>
<td>4 000</td>
<td>100 000</td>
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</table>

**Product name**

**L x W x H [mm]**

### Notes
1. t [h]: L70/B50 @ 25 °C (Tf); t [h]: L85/B10 @ 25 °C (Tf)
- **SUPERIOR CLASS**
- **PERFORMANCE CLASS**
- **VALUE CLASS**
PANEL PERFORMANCE DALI

Square recessed panel luminaires, tool-free installation, for ceiling systems with DALI-2 IoT technology

PRODUCT FEATURES

- Extruded aluminium frame, Polystyrene diffuser
- Lifetime (L80/B10): up to 60 000 h (at 25 °C)
- High luminous efficacy: up to 120 lm/W
- 5-pole terminal block, cable cross section up to 5 × 2.5 mm²

PRODUCT BENEFITS

- Comfortable light and high color consistency
- Through-wiring possible up to 2.5 qmm with included connector box
- Low-flicker light thanks to special electronic control gear
- Energy savings thanks to high system efficacy of up to 120 lm/w
- 5 years guarantee

AREAS OF APPLICATION

- Direct replacement for luminaires with fluorescent lamps
- Offices, conference rooms
- Reception areas, foyers, corridors, elevators

EQUIPMENT / ACCESSORIES

- Accessories for several mounting options available*
- Connector box with 5-pole terminal included
- Security rope for luminaire included

* Please note: available = available as an optional accessory.
* Refer to www.ledvance.com/guarantee for precise conditions.

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.

FURTHER PRODUCT DETAILS

PL PFM 600 DALI 30W3000K
## PANEL PERFORMANCE 600 DALI
Square recessed panel luminaires, tool-free installation, for 600 × 600 mm ceiling systems with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
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<tr>
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<td>3600</td>
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<td>4000</td>
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<td>PL PFM 600 DALI 36W 3000 K</td>
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</table>

### CRI, UGR, TRO, IK
- CRI: > 80
- UGR: < 22
- TRO: < 5 %
- IK: IK02

### Panel Performance Measurements
- L x W x H [mm]: 595 × 595 × 32
- t [h]: L70/B50 @ 25 °C (Ta) / t [h]: L80/B10 @ 25 °C (Ta)

### Superior Class, Performance Class, Value Class
- SUPERIOR CLASS
- PERFORMANCE CLASS
- VALUE CLASS

## PANEL PERFORMANCE 625 DALI
Square recessed panel luminaires, tool-free installation, for 625 × 625 mm ceiling system with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>Im</th>
<th>K</th>
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<th>L80</th>
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<td>4 x 18 W/4 x 14 W FL</td>
<td>4058075381991</td>
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<td>3600</td>
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<tr>
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<td>PL PFM 625 DALI 36W/4000 K</td>
<td>4 x 18 W/4 x 14 W FL</td>
<td>4058075440654</td>
<td>36</td>
<td>4500</td>
<td>120</td>
<td>4000</td>
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</tbody>
</table>

### CRI, UGR, TRO, IK
- CRI: > 80
- UGR: < 22
- TRO: < 5 %
- IK: IK02

### Panel Performance Measurements
- L x W x H [mm]: 620 × 620 × 32
- t [h]: L70/B50 @ 25 °C (Ta) / t [h]: L80/B10 @ 25 °C (Ta)

### Superior Class, Performance Class, Value Class
- SUPERIOR CLASS
- PERFORMANCE CLASS
- VALUE CLASS

## PANEL PERFORMANCE 1200 × 300 DALI
Rectangular recessed panel luminaires, tool-free installation for 1200 × 300 mm ceiling systems with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>Im</th>
<th>K</th>
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<th>L80</th>
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<tr>
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<td>2 x 36 W FL</td>
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<td>4000</td>
<td>120</td>
<td>4000</td>
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</table>

### CRI, UGR, TRO, IK
- CRI: > 80
- UGR: < 22
- TRO: < 5 %
- IK: IK03

### Panel Performance Measurements
- L x W x H [mm]: 1195 × 295 × 9
- t [h]: L70/B50 @ 25 °C (Ta) / t [h]: L80/B10 @ 25 °C (Ta)

### Superior Class, Performance Class, Value Class
- SUPERIOR CLASS
- PERFORMANCE CLASS
- VALUE CLASS
COMPATIBILITY OF PANEL ACCESSORIES WITH PANEL FAMILIES

1. SURFACE MOUNT KIT
- Pre-assembled ready to install
- Simple fixing with magnets
- Cross brace for greater stability
- Material: aluminum

2. SURFACE MOUNT KIT VALUE
- Kit for tool-free mounting with corner clips
- Material: aluminum

3. EMERGENCY CONVERSION BOX
- Conversion of a selection of panels to safety luminaires
- Reduces warehousing complexity
- Plug-and-play system for easy installation

4. SUSPENSION KIT
- Suspension length: 1500 mm
- Material: steel

5. RECESSED MOUNT CLIPS
- Ceiling thickness: 10 to 20 mm
- Material: steel

6. RECESSED MOUNT FRAME
- Pre-assembled ready to install
- Seamless recessed mounting
- Ceiling thickness: 8 to 30 mm
- Material: aluminum
## COMPLIANT AT A GLANCE

<table>
<thead>
<tr>
<th>Accessories</th>
<th>GTIN (EAN)</th>
<th>Panel IndiviLED</th>
<th>Panel Performance</th>
</tr>
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<tbody>
<tr>
<td>Panel 600 Surface Mount Kit H75</td>
<td>4058075472914</td>
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<td>✔</td>
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<td>Panel 625 Surface Mount Kit H75</td>
<td>4058075472938</td>
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<td>Panel 1200x300 Surface Mount Kit</td>
<td>4058075108820</td>
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<tr>
<td>Panel 600 Surface Mount Kit H70 Value</td>
<td>4058075402843</td>
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<tr>
<td>Panel 625 Surface Mount Kit H70 Value</td>
<td>4058075402867</td>
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<td>Panel 1200x300 Surface Mount Kit Value</td>
<td>4058075472952</td>
<td>✔</td>
<td>✔</td>
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<td>Panel 600 Recessed Mount Frame</td>
<td>4058075402881</td>
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<td>Panel 625 Recessed Mount Frame</td>
<td>4058075402904</td>
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<td>Panel 1200x300 Recessed Mount Frame</td>
<td>4058075472976</td>
<td>✔</td>
<td>✔</td>
</tr>
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</table>

1 The accessories are compatible with the Panels in the respectively matching size. For details refer to the User Instructions. | 2 Not in combination with Panel IndiviLED Emergency
2 Not in combination with Surface Mount Kits, Surface Mount Clips or Suspension Kit

---

Technical product details for panel accessories found on next page
PANEL ACCESSORIES
Mounting accessories for panel luminaires, combination according to the accessories matrix

- Suspension Kit:
  suspension length 1.5 m adjustable for various applications by screw connection
- Surface Mount Kit:
  sturdy, cross-stiffened aluminum frame with magnetic corners
- Surface Mount Kit Value:
  Aluminum frame with polycarbonate strip.
  With rectangular frame, panel insertion is possible from short or long frame side.
- Recessed Mount Clips Value 1 × 4:
  ceiling thickness 10–20 mm, plasterboard, wood and metal ceilings
<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>L × W × H [mm]</th>
<th>COLOUR</th>
<th>SIZE</th>
<th>#</th>
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<tbody>
<tr>
<td>PANEL 600 SURFACE MOUNT KIT H75</td>
<td>4058071472914</td>
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<td>Aluminum</td>
<td>White</td>
<td>1</td>
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<tr>
<td>PANEL 625 SURFACE MOUNT KIT H75</td>
<td>4058071472938</td>
<td>626 × 626 × 75</td>
<td>Aluminum</td>
<td>White</td>
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<tr>
<td>PANEL 1200 Surface Mount Kit</td>
<td>4058071108820</td>
<td>1201 × 301 × 56</td>
<td>Aluminum</td>
<td>White</td>
<td>2</td>
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<tr>
<td>PANEL 1200/300 SURFACE MOUNT KIT VAL</td>
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<tr>
<td>PANEL 600 SURFACE MOUNT KIT H70 VAL</td>
<td>4058071402843</td>
<td>613 × 613 × 70</td>
<td>Aluminum</td>
<td>White</td>
<td>3</td>
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<tr>
<td>PANEL 625 SURFACE MOUNT KIT H70 VAL</td>
<td>4058071402867</td>
<td>638 × 638 × 70</td>
<td>Aluminum</td>
<td>White</td>
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</tr>
<tr>
<td>PANEL Suspension Kit</td>
<td>4058071402928</td>
<td>30 × –</td>
<td>Steel</td>
<td>Steel</td>
<td>5</td>
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<tr>
<td>PANEL 600 RECESSED MOUNT FRAME</td>
<td>4058071402881</td>
<td>625 × 625 × 76</td>
<td>Aluminum</td>
<td>White</td>
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<tr>
<td>PANEL 625 RECESSED MOUNT FRAME</td>
<td>4058071402904</td>
<td>650 × 650 × 76</td>
<td>Aluminum</td>
<td>White</td>
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<tr>
<td>PANEL 1200/300 RECESSED MOUNT FRAME</td>
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<td>PANEL RECESSED MOUNT CLIPS VAL 4x</td>
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</table>
_PANEL DIRECT/INDIRECT 1200 UGR<19 DALI

Suspended edge-lit luminaires for direct and indirect light emission, low glare, 1200 mm with DALI-2 IoT technology

PRODUCT FEATURES
- Very slim aluminum housing
- Rectangular (1200 mm × 300 mm) stand-alone luminaires with direct (70%) and indirect (30%) light emission
- Steel cable suspension, length: 1.5 m
- Lifetime (L70/B50): up to 50 000 h (at 25 °C)

PRODUCT BENEFITS
- Functional SCALE design luminaire for office applications (driver integrated in the ceiling rose)
- Special directional light design and PMMA diffuser for homogeneous, low-glare lighting (UGR < 19)
- Low flicker light thanks to special electronic control gear
- Comfortable light and high color consistency SDCM ≤3
- 5 years guarantee

AREAS OF APPLICATION
- Efficient replacement for traditional T8 and T5 luminaires
- Offices
- Meeting rooms
- Conference rooms
- Reception areas and foyers

EQUIPMENT / ACCESSORIES
- Suspension kit included

FURTHER PRODUCT DETAILS

1 Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
**PANEL DIRECT/INDIRECT 1 200 UGR<19 DALI**

Suspended edge-lit luminaires for direct and indirect light emission, low glare, 1 200 mm with DALI-2 IoT technology

**Product name** | **Segmentation** | **GTIN (EAN)** | **W** | **lm** | **K** | **L70** | **L80** | **≥ E**
--- | --- | --- | --- | --- | --- | --- | --- | ---
**PANEL D/I 1200 UGR<19 DALI 36W 3000 K** | 2 × 58 W FL | 0508775048328 | 36 | 3 800 | 105 | 3 000 | 80 000 | 60 000 | 110 | DALI-2/IoT
**PANEL D/I 1200 UGR<19 DALI 36W 4000 K** | 2 × 58 W FL | 050877504042 | 36 | 4 000 | 110 | 4 000 | 80 000 | 60 000 | 110 | DALI-2/IoT

**Product name** | **CRi** | **UGR** | **≥ E** | **IK** | **L × W × H [mm]** | **∅ × H [mm]**
--- | --- | --- | --- | --- | --- | ---
**PANEL D/I 1200 UGR<19 DALI 36W 3000 K** | ≥ 80 | < 19 | < 5 % | IK03 | 3 520 | 1 200 × 300 × 16
**PANEL D/I 1200 UGR<19 DALI 36W 4000 K** | ≥ 80 | < 19 | < 5 % | IK03 | 3 520 | 1 200 × 300 × 16

1 t [h]: L70/B50 @ 25 °C (Ta) / t [h]: L80/B10 @ 25 °C (Ta)

- **SUPERIOR CLASS**
- **PERFORMANCE CLASS**
- **VALUE CLASS**
LINEAR INDIVILED® DIRECT DALI

Surface mounted luminaire for single luminaire or light line application with DALI-2 IoT technology

**PRODUCT FEATURES**
- Aluminum housing, plastic end caps, white
- Each LED with individual lens and reflector for UGR ≤ 16 and homogeneous light distribution
- Usable as a single or strip lighting luminaire
- Mountable directly on the ceiling as a surface-mounted luminaire without additional accessories
- The suspension kit has to be ordered separately as an accessory

**PRODUCT BENEFITS**
- Luminaire in timeless SCALE design, usable as a single or lighting strip solution
- Also usable as pendant (order accessories separately)
- Low flicker light thanks to special electronic control gear
- All versions with 5-year guarantee, except emergency version: 3 years (built-in 3h battery)

**AREAS OF APPLICATION**
- Direct replacement for luminaires with fluorescent lamps
- Offices, schools
- General indoor illumination
- Corridors, entrance areas
- Seamless linear lighting

**EQUIPMENT / ACCESSORIES**
- Suspension kit available*
- Line connection adapter available*

---

**FURTHER PRODUCT DETAILS**

LN INDV D 1200 34W 4000K DALI

* Please note: available = available as an optional accessory.
* Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
LINEAR INDIVILED® DIRECT DALI
Surface mounted luminaire for single luminaire or light line application with DALI-2 IoT technology

### Product name | Segmentation | GTIN (EAN) | W | lm | % | K | L70 | L80 | /
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
LN INDV D DALI 1200 34W 3000 K | | 4058170503946 | 2 x 28W FL | 34 | 3800 | 110 | 3 000 | 60 000 | 50 000 | 70 | DALI-2/IoT
LN INDV D DALI 1200 34W 4000 K | | 4058170503960 | 2 x 28W FL | 34 | 4200 | 125 | 4 000 | 60 000 | 50 000 | 70 | DALI-2/IoT
LN INDV D DALI 1500 48W 3000 K | | 4058170503984 | 2 x 49W FL | 48 | 5300 | 110 | 3 000 | 60 000 | 50 000 | 70 | DALI-2/IoT
LN INDV D DALI 1500 48W 4000 K | | 4058170504004 | 2 x 49W FL | 48 | 5700 | 120 | 4 000 | 60 000 | 50 000 | 70 | DALI-2/IoT

### Product name | CRI | UGR | 
--- | --- | ---
LN INDV D DALI 1200 34W 3000 K | > 80 | < 16
LN INDV D DALI 1200 34W 4000 K | > 80 | < 16
LN INDV D DALI 1500 48W 3000 K | > 80 | < 16
LN INDV D DALI 1500 48W 4000 K | > 80 | < 16

1 t [h]: L70/B50 @ 25 °C (Tf); t [h]: L85/B10 @ 25 °C (Tf)

- **SUPERIOR CLASS**
- **PERFORMANCE CLASS**
- **VALUE CLASS**
LINEAR INDIVILED® DIRECT ACCESSORIES
Mounting accessories for LINEAR INDIVILED® luminaires

- DALI Suspension Kit:
  1 x transparent 1.5m cable 5 x 0.75 mm +
  2 x Y wire suspension 1.5m
- Suspension Wire:
  1 x Y wire suspension 1.5m

- Through Wiring Kit:
  3 x 1.5 mm with fast connector

<table>
<thead>
<tr>
<th>Product name</th>
<th>GTIN (EAN)</th>
<th>L x W x H [mm]</th>
<th>WIDTH</th>
<th>COLOR</th>
<th>COLOR</th>
<th>HEIGHT</th>
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</thead>
<tbody>
<tr>
<td>LN INDV DALI Suspension Kit</td>
<td>4058075533303</td>
<td>100 x 25</td>
<td>Steel</td>
<td>White</td>
<td>1</td>
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<td>LN INDV Suspension Wire</td>
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<td>1560 x 1 x 1</td>
<td>Steel</td>
<td>Steel</td>
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<tr>
<td>LN INDV Lighthouse Connector</td>
<td>4058075533341</td>
<td>82 x 40 x 12</td>
<td>Steel</td>
<td>Steel</td>
<td>1</td>
<td>3</td>
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<tr>
<td>LN INDV 1200 Through Wiring Kit</td>
<td>4058075580130</td>
<td>1250 x 20 x 7</td>
<td>Polycarbonate (PC)</td>
<td>Yellow</td>
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<td>LN INDV 1500 Through Wiring Kit</td>
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</tbody>
</table>

1 Refer to www.ledvance.com/guarantee for precise conditions
OUR CHECKLIST FOR YOUR LINEAR INDIVILED DALI SYSTEM

**Typical installation:** We have put together for you all the necessary components for suspended installation of three luminaires as strip lighting. For more information see the operating instructions for Linear IndiviLED.

**INSTALLATION OF 3 × LINEAR INDIVILED DALI**

1 x Suspension Kit for the first luminaire

2 x Suspension Wire, one for each additional luminaire

3 x Throughwiring Kit

3 x Throughwiring Kit DALI

2 x Lightline Connector

The through-wiring must be fitted by an installer.

**ORDER LIST**

- 3 x Linear IndiviLED Luminaire
- 3 x Throughwiring Kit
- 3 x Throughwiring Kit DALI
- 2 x Lightline Connector
- 1 x Suspension Kit
- 2 x Suspension Wire
DOWNLIGHT UGR19 DALI

Low-glare downlights, suitable for computer screen workplaces with DALI-2 IoT technology

PRODUCT FEATURES

— Housing Material: aluminium with mirror-finished reflector
— Type of protection: IP54 (room side) / IP20 (back side)
— Through wiring possible
— Connector box with push wire terminal for tool-free connection

PRODUCT BENEFITS

— Good glare reduction (UGR < 19) and cut-off angle up to 30° for comfortable indoor lighting
— Easy and quick installation thanks to connector box with 5-pole toolless terminal
— Low-flicker light
— Suitable for use in dusty and humid environments thanks to high IP rating
— 5 years guarantee

AREAS OF APPLICATION

— Suitable for office applications, especially for computer screen workplaces
— Direct replacement for luminaires with compact fluorescent lamps
— Entrances / Hallways
— Bathrooms, kitchens and sheltered outdoor areas
— General Illumination

EQUIPMENT / ACCESSORIES

— External control gear included

FURTHER PRODUCT DETAILS

DL UGR19 DN155 PFM 14W830 DALI WT

¹ Refer to www.ledvance.com/guarantee for precise conditions

The pictures shown in the catalog are for illustration purposes only. For information on size and color, please refer to the product table.
**DOWNLIGHT UGR19 DALI**

Low-glare downlights, suitable for computer screen workstations with DALI-2 IoT technology

<table>
<thead>
<tr>
<th>Product name</th>
<th>Segmentation</th>
<th>GTIN (EAN)</th>
<th>W</th>
<th>Im</th>
<th>%</th>
<th>K</th>
<th>L70</th>
<th>L80</th>
<th>DALI-2/IoT</th>
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<td>1 x 26 W CFL</td>
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<td>1500</td>
<td>105</td>
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<td>70000</td>
<td>60000</td>
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</table>

Product name | CRI | UGR | IK | L x W x H [mm] | Ø x H [mm] |
<table>
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<th></th>
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<td>&lt; 19</td>
<td>&lt; 10 %</td>
<td>155</td>
<td>650</td>
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<tr>
<td>DL UGR19 PFM DN155 14 W 840 WT IP54 DALI</td>
<td>≥ 80</td>
<td>&lt; 19</td>
<td>&lt; 10 %</td>
<td>155</td>
<td>650</td>
</tr>
<tr>
<td>DL UGR19 PFM DN195 21 W 830 WT IP54 DALI</td>
<td>≥ 80</td>
<td>&lt; 19</td>
<td>&lt; 10 %</td>
<td>195</td>
<td>900</td>
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<tr>
<td>DL UGR19 PFM DN195 21 W 840 WT IP54 DALI</td>
<td>≥ 80</td>
<td>&lt; 19</td>
<td>&lt; 10 %</td>
<td>195</td>
<td>900</td>
</tr>
</tbody>
</table>

1 L70/B50 @ 25 °C (T1) / t [h]: L85/B10 @ 25 °C (T2)
Would you like to use LEDVANCE VIVARES to meet your customers’ needs to perfection, but are not 100 % sure about some things? Then take advantage of the cooperative support our experts offer. They will work alongside you and will be on hand with advice at any stage of your project.

**PREPLANNING AND PRECONFIGURATION**

On request, LEDVANCE will take over complete preconfiguration of the system and all its components. This will allow you to carry out commissioning on site quickly, easily and efficiently. You can find information about our planning support in the gray box on the left.

**COMMISSIONING AND INSTRUCTION**

After you have installed the luminaires and components, you can also use the professional programming and commissioning service provided by our experts. This will ensure that the VIVARES system meets your customer’s needs in the best possible way. Our experts will also instruct you in the system and show you how to get the most out of it.

**DURING OPERATION**

Even if the VIVARES system has long been commissioned, you can rely on us at any time. For example, if there are any problems our experts will take care of troubleshooting on site. And if the requirements of the VIVARES system change over time? Then LEDVANCE will be happy to support you in reprogramming, reconfiguring or expanding the system.

Do you have any questions about your VIVARES project or would you like any help? Then just email or call us!

E-Mail: kundenservice@ledvance.com
Tel.: +49 89 780673-660
WHENEVER AND WHEREVER: 
THE ONLINE PORTAL WITH ALL THE 
INFORMATION, ADVICE AND EXPERTISE

Are you looking for information about our products and services? LEDVANCE always keeps you up to date: at wholesalers, through our sales employees or via our Customer Service Center (email: contact@ledvance.com). Here you’ll find an overview of our competencies, databases and tools.

NEW: THE ONLINE TRAINING PLATFORM
A host of application-oriented eLearnings for professional users, practical advice on installation, integrated standards checks, planning tips, and much more.

Register and find out more at training.ledvance.com

PERFECTLY FILTERED
Use the online filters to find precisely what you’re looking for in our luminaire and LMS portfolio – type of mounting, IP rating, light color, etc.: ledvance.com/luminaires and ledvance.com/light-management-systems

REFERENCES PROVIDE INSPIRATION
A selection of some top lighting projects can be found at: ledvance.com/projects

LEDVANCE SERVICE-PLUS
Our specialized sales department supports and advises our commercial end customers – including face-to-face. Find out all you need to know at ledvance.com/vam

DOWNLOAD CENTER
Catalogs, compatibility overviews, brochures, and much more are available for you in our download center: ledvance.com/download

OUR TOOLS FOR YOU
From the Fast Light Calculation Tool to the LED Strip System Configurator – find our practical tools at: ledvance.com/tools

SERVICE AT A GLANCE
You will find a summary of all of our service offerings at ledvance.com/services

FIND OUR LATEST NEWS ON:

VIVARES YOUTUBE CHANNEL
Our YouTube channel is packed with product training videos, commissioning instructions and more. Check them out at: ledvance.com/zigbeevideos

VIVARES DALI:
ledvance.com/dalivideos

FIND OUR LATEST NEWS ON:

LEDVANCE VIVARES | ONLINE SERVICES
GOOD LIGHT ALL ROUND
THE FULL LEDVANCE RANGE

LEDVANCE is leading the fight against bad light in every area. That’s good news for you because when it comes to future-proof solutions relating to luminaires and lamps, HCL systems, electronic components, light management and smart residential products, you have a competent partner in LEDVANCE on your side for your complex lighting projects. You can always rely on LEDVANCE for excellent brand quality, professional service and a good price/performance ratio.

AESTHETICALLY FUNCTIONAL LUMINAIRES

The extensive luminaire portfolio covers virtually all professional and residential applications and delivers outstanding quality and functionality. The new BIOLUX HCL system is a winner of the VDE Quality Certificate, and the red dot 2020 Product Design and 2020 German Innovation Awards.

EACH LAMP A LIGHTING SOLUTION

The lamp portfolio includes a wide choice of shapes and base sizes as well as types with additional functions (e.g. sensors), all with outstanding efficiency and durability. Alongside UV-C and LED lamps, LEDVANCE will continue to offer conventional halogen, energy-saving, fluorescent and gas discharge lamps.

FLEXIBLE LED STRIP SYSTEM

The LED Strip System includes a large number of flexible LED strips, drivers and matching accessories. With a wide range of luminous fluxes and light colors, the system allows bespoke lighting solutions to be created for virtually any indoor or outdoor application. Easy to plan, easy to combine and easy to install – that’s the principle here.

VIVARES: LIGHT MANAGEMENT, MORE COMFORTABLE THAN EVER

The future-proof IoT light management system (LMS) from LEDVANCE makes it easier and more flexible than ever to always produce optimal lighting conditions for defined requirements. The system is extremely reliable and compatible and offers all LMS components and matching LED luminaires from one source.

SMART LIGHTING FOR RESIDENTIAL APPLICATIONS

Our smart residential products offer a comprehensive combination of innovation, quality, reliability and user-friendliness. We provide a suitable solution for a variety of requirements that intelligent lighting has to meet.

MORE INFORMATION AND CLEVER TOOLS

For more information on LEDVANCE’s extensive product portfolio and clever apps and tools that will help you in your day-to-day work go to www.ledvance.com.
## SHEDDING LIGHT, SYMBOLS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>IP</td>
<td>Type of protection</td>
</tr>
<tr>
<td>IP20</td>
<td>Type of protection, back/front</td>
</tr>
<tr>
<td>IP40</td>
<td>Type of protection, back/front</td>
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<tr>
<td>IK</td>
<td>IK impact rating</td>
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<tr>
<td>CRI</td>
<td>Color rendering index</td>
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<tr>
<td>SDCM ≤3</td>
<td>MacAdam color consistency</td>
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<tr>
<td>Dimmable</td>
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<tr>
<td>Lm</td>
<td>Luminous flux in lm</td>
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<tr>
<td>W</td>
<td>Power in W</td>
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<tr>
<td>K</td>
<td>Color temperature in K</td>
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<tr>
<td>Lm/W</td>
<td>Luminous efficacy</td>
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<tr>
<td>Guarantee</td>
<td>5 year guarantee</td>
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<tr>
<td>Detection angle</td>
<td></td>
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<tr>
<td>Ceiling opening</td>
<td></td>
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<tr>
<td>Replacement wattage and type</td>
<td></td>
</tr>
<tr>
<td>MATERIAL</td>
<td>Cover material</td>
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<tr>
<td>COLOR</td>
<td>Product color</td>
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<tr>
<td>IN</td>
<td>Nominal input current</td>
</tr>
<tr>
<td>No. of controllable devices</td>
<td></td>
</tr>
<tr>
<td>Hz</td>
<td>Mains frequency</td>
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<tr>
<td>Ta</td>
<td>Ambient temperature range</td>
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<tr>
<td>V IN</td>
<td>Nominal input voltage</td>
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<tr>
<td>Detection area</td>
<td></td>
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<tr>
<td>Type of installation</td>
<td></td>
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<tr>
<td>UGR</td>
<td>Unified Glare Rating</td>
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<tr>
<td>Flicker Value</td>
<td></td>
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<tr>
<td>Operating range, light sensor</td>
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<tr>
<td>Maximum installation height</td>
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<td>L70 t [h]: L70/B50 @ 25 °C (Ta)</td>
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<td>L80 t [h]: L80/B10 @ 25 °C (Ta)</td>
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<tr>
<td>Beam angle in °</td>
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<td>Weight</td>
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<td>Unit of packaging</td>
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<td>Zigbee 3.0 technology</td>
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### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>CONV</td>
<td>Converter</td>
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<tr>
<td>D</td>
<td>Direct</td>
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<tr>
<td>DALI</td>
<td>DALI-2 technology</td>
</tr>
<tr>
<td>D/I</td>
<td>Direct/Indirect</td>
</tr>
<tr>
<td>DL</td>
<td>Downlight</td>
</tr>
<tr>
<td>DN</td>
<td>Diameter Nominal</td>
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<td>EM</td>
<td>Emergency</td>
</tr>
<tr>
<td>INDV</td>
<td>IndiviLED</td>
</tr>
<tr>
<td>LI</td>
<td>Luminaire integration</td>
</tr>
<tr>
<td>LN</td>
<td>Linear</td>
</tr>
<tr>
<td>L/O</td>
<td>Light and occupancy</td>
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<tr>
<td>O</td>
<td>Occupancy</td>
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<tr>
<td>PL</td>
<td>Panel</td>
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<tr>
<td>PFM</td>
<td>Performance</td>
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<td>SENS</td>
<td>Sensor</td>
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<td>UGR</td>
<td>Unified Glare Rating</td>
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<td>VAL</td>
<td>Value</td>
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<tr>
<td>WT</td>
<td>White</td>
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<tr>
<td>ZB</td>
<td>Zigbee 3.0 technology</td>
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</table>
ABOUT LEDVANCE

With offices in more than 50 countries and business activities in more than 140 countries, LEDVANCE is one of the world’s leading general lighting providers for professional users and end consumers. Having emerged from OSRAM’s general lighting division, LEDVANCE offers a wide-ranging portfolio of LED luminaires for a broad spectrum of applications, intelligent lighting products for Smart Home and Smart Building solutions, one of the most comprehensive ranges of advanced LED lamps in the lighting industry, traditional light sources, an LED Strip System and light management systems.

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