THE SYSTEM AT A GLANCE

VIVARES LIGHT-MANAGEMENT

SEPTEMBER 2022

LEDVANCE

LEDVANCE:
ADVANCING LIGHT

WHAT MAKES US HIGH-FLYERS?
COMFORT AND EFFICIENCY.

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.

In offices, the comfortable VIVARES IoT light management system always produces optimal lighting conditions for defined requirements, helping to make significant energy and CO_2 savings. Optional use of energy monitoring and maintenance assistance via a cloud as well as remote access to the system increase economy even further. As VIVARES HCL, the system also boosts concentration, well-being and therefore employee performance.

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.

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VIVARES ZIGBEE 🖑

VIVARES DALI 🖑

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Online at
ledvance.com/vivares

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LEDVANCE VIVARES
COMFORTABLE LIGHT

VIVARES, the IoT light management system from LEDVANCE, is a great solution for energy-saving, eco-friendly and future-proof office lighting – as an addition, for maintenance, and for renovations and new buildings.

VIVARES produces optimal lighting conditions in all defined requirements and offers potential energy and CO_2 savings of up to 80 %. It works either with DALI or Zigbee technology with maximum stability, is highly compatible and particularly comfortable for installers and users alike. The system can be maintained remotely which increases economy beyond general maintenance and energy savings.

LEDVANCE offers you everything from one source – all LMS components as well as matching LED luminaires. In addition to luminaires, the flexible LED strips can now also be combined with VIVARES to achieve optimal standard-compliant illumination in offices. What's more, various SMART+ lamps can be controlled via VIVARES Zigbee and conventional lamps can be integrated via SMART+ plug.

The new VIVARES HCL system combines the advantages of lighting control with human centric lighting, supplying entire floor solutions with HCL lighting – for greater concentration, well-being and performance.

Optional connection of the IoT light management system to a cloud application also allows for maintenance assistance and energy monitoring.

The data obtained reveals potential savings that can be optimized on the system the future. That's what economy means today.

PERFECT FOR MODERN OFFICES

Choosing the right lighting solution is particularly important in offices because, in addition to complying with standards, it's all about performance, creativity and efficiency. The VIVARES light management system is perfect for this because it's easy to install and use, and also economical and sustainable – and therefore future-proof.

Innovative design meets comfort for an appealing mix of styles with our flexible LED strips and high-quality LED luminaires.

In modern offices, glare-free lighting produces ideal working conditions and an atmospheric ambiance.

MANAGEMENT

VIVARES ZIGBEE
WIRELESS AND HIGHLY FLEXIBLE

Perfectly connected: The VIVARES Zigbee controller communicates with up to 200 compatible devices using the highly reliable Zigbee 3.0 wireless standard. This makes the system the first choice when no additional control lines should or can be laid, for example when modernizing existing buildings or refurbishing listed buildings. VIVARES Zigbee is also ideal for changing room situations because the system is flexible and easy to adapt.

VIVARES DALI
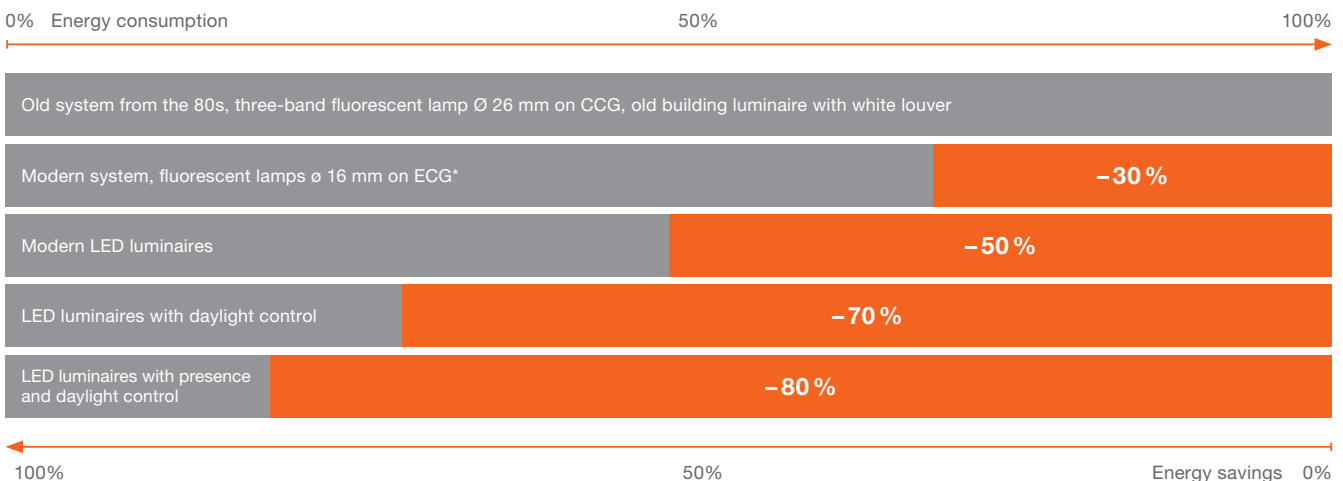### WIRED INDUSTRY
STANDARD REDEFINED

Established for the future: VIVARES DALI controls up to 1 024 luminaires and 1 008 input devices using the established DALI-2 industry standard. All VIVARES DALI products are DALI-2 certified and therefore also compatible with other DALI-2 products on the market. VIVARES DALI is suitable whenever additional control lines can be laid without any problems, for example in suspended ceilings, when retrofitting existing DALI installations or when equipping new buildings. VIVARES DALI also has an optional KNX interface and can be integrated into the building control system.

BETTER LIGHT AND ENERGY SAVINGS

A look at numerous offices shows that many lighting systems are outdated and far from future-proof. Modernization sustainably reduces energy consumption, saves costs and brings a significant increase in lighting quality.

Potential savings for interior lighting – example of a 2-axis office:

0% Energy consumption	50%	100%

Old system from the 80s, three-band fluorescent lamp Ø 26 mm on CCG, old building luminaire with white louver	
Modern system, fluorescent lamps ø 16 mm on ECG*	−30 %
Modern LED luminaires	−50 %
LED luminaires with daylight control	−70 %
LED luminaires with presence and daylight control	−80 %

100%	50%	Energy savings 0%

* Fluorescent lamps with low power loss, luminaires with modern directional lighting technology. Source: licht.de

GOOD REASONS FOR CHOOSING VIVARES HCL:

– Biologically optimized lighting for different work situations
– Certified LEDVANCE HCL curves for very accurate simulation of natural daylight
– Increases well-being and performance
– Luminaire specification adapted to HCL requirements
– Easy integration and use with the VIVARES light management system

FOR EFFECTIVE WORKPLACE CONCEPTS
VIVARES HCL

Little daylight, dark floors and artificial light around the clock are working conditions that are quite common in office buildings. But no more because VIVARES HCL is the future. The system combines VIVARES light management with BIOLUX HCL. It adapts the lighting in open-plan offices or on entire floors to the natural changes in daylight using a certified algorithm: automatically, intelligently and easily controllable. That means that everyone in the building will benefit from the positive effects of HCL light. The result: more well-being, more efficiency and more satisfaction.

FIND OUT MORE
For more information about VIVARES HCL visit:
ledvance.com/vivares

JUST LIKE IN THE OPEN AIR

Perfect interaction: In combination with BIOLUX HCL luminaires, VIVARES HCL as a Zigbee or DALI system mimics the changes in natural daylight very precisely. This means that it also provides maximum concentration in dark rooms in the morning and relaxation in the evening.

The lighting feels like you are sitting in the open air. And that's not all. Various studies have shown that lights that are precisely simulating natural daylight have a surprisingly positive effect on performance and productivity.

WHAT CAN HUMAN CENTRIC LIGHTING DO?

With the right light at the right time human centric lighting (HCL) creates a working environment that simulates the changes in natural daylight with its visual, biological and emotional effects. To achieve this, the luminaires are controlled by an intelligent control system with appropriate light profiles.

Through color temperatures and illuminance levels, human centric lighting (HCL) can simulate the course of natural daylight in such a way that it provides positive support for the human circadian rhythm (our "inner clock"). A neutral or cold white light color, for example, can energize in the morning. Warm white light is relaxing and ideal for the evening. HCL supports health, well-being and performance.

DAYLIGHT CHANGES IN THE SUMMER[1]

- Warm white
- Transition
- Cold white
- Natural light
- Artificial light
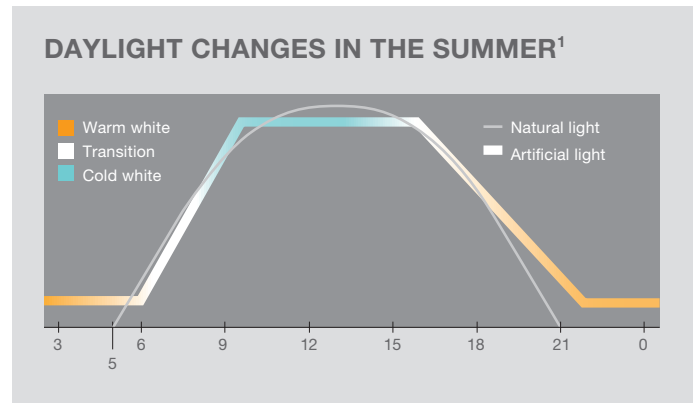
HCL is based on the natural changes in daylight. This has a positive effect on people.

HCL HAS A POSITIVE EFFECT ON PEOPLE – ALSO IN TERMS OF ECONOMY[2]

↑ 12 %

↑ 18 %

↑ 14 %

↑ 25 %

OFFICE
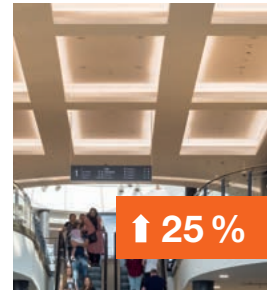12 % higher employee performance in offices

PRODUCTION
Worker productivity increases by up to 18 %

EDUCATION
14 % improvement in learning and better grades

RETAIL
Up to 25 % increase in sales

Human centric lighting boosts well-being, motivation and performance. That's why employees are not only much more productive but also sick less often. The following sample calculation illustrates the positive effects on a company's balance sheet.

VIVARES HCL SAMPLE CALCULATION: COMPANY WITH 40 EMPLOYEES/WORKPLACES

INVESTMENT FOR THE OWNER[3]

Material costs:
– 60 BIOLUX HCL luminaires
– 1 Controller incl. HCL curve

Installation costs:
– Installer (Germany)
– 2 days / 2 installers

∑ 30 000 €

SAVINGS FOR THE USER[3, 4]

– 40 employees / desks
– 10 million € turnover
– 5 % profit = € 500 000
– 40 000 € annual salary per employee

Increase in productivity by
+ 10 %[5] = 50 000 €
Reduction in sick leave costs by
– 1 %[6] = 16 000 €

∑ 66 000 €

PAYBACK TIME: 6 MONTHS

Plus additional energy savings thanks to LED modernization and automatic lighting control such as presence sensors.

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[1] Source: www.licht.de/de/grundlagen/nicht-visuelle-lichtwirkungen/praxisbeispiele/biologisch-wirksames-licht-im-buero | [2] Source: www.ecodesignconsultants.co.uk/healthy-buildings/
[3] Illustrative example and prices. Prices may vary in your country. [4] Compared to conventional lighting, e.g. T8 fluorescent lamp | [5] Source: CBRE Healthy Offices, The snowball effect of healthy offices, (2017)
[6] Source: AT Kearney, Quantified benefits of Human Centric Lighting, (2015)

TWO HCL SYSTEMS,
DIFFERENT APPLICATIONS

LEDVANCE offers you two innovative solutions for human centric lighting. BIOLUX HCL is your gateway to the HCL world. In its minimum configuration, it only consists of a control unit and a luminaire. VIVARES HCL, on the other hand, combines a complex light management system with HCL and is also suitable as an open-plan or floor solution thanks to the connection of a large number of devices per controller.

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

	BIOLUX HCL (Single offices/conference rooms)	VIVARES HCL Zigbee (Open plan offices/floors)	VIVARES HCL DALI (Open plan offices/floors)
Number of controller devices in a network	1	1	max. 8
Number of devices	max. 48	max. 200	Luminaires: max. 1 024 (8 ×128) Components: max. 1 008 (8 ×126)
Mode	5 light profiles	1 light profile (NATURAL)	5 light profiles
Adjustment with the BIOLUX HCL control unit	Yes	No	No
Commissioning	BIOLUX HCL App	VIVARES Portal	VIVARES DALI commissioning app
Cloud services	No	Yes	Yes
Presence sensor combinable	Yes	Yes	Yes
Technology	Zigbee 3.0	Zigbee 3.0	DALI-2

BIOLUX HCL: A SOLID FOUNDATION

The use of BIOLUX HCL luminaires together with BIOLUX HCL control unit is ideal for single offices and conference rooms with up to 48 BIOLUX HCL products. 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. The BIOLUX HCL system is also a winner of design, function and innovation awards.

ALL FROM A SINGLE SOURCE

LEDVANCE offers you all the products you need for a VIVARES 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:
contact@ledvance.com

BIOLUX HCL LIGHT SOURCES

BIOLUX HCL PANEL ZIGBEE
– Suitable luminaire for BIOLUX, VIVARES and other Zigbee 3.0 Light Management Systems
– Compatible with VIVARES CLOUD SERVICES
– Through-wiring possible with included connector box

BIOLUX HCL DOWNLIGHT ZIGBEE
– Suitable luminaire for BIOLUX, VIVARES and other Zigbee 3.0 Light Management Systems
– Compatible with VIVARES CLOUD SERVICES
– Through-wiring possible with included connector box

BIOLUX HCL PANEL DALI
– External DALI-2 driver for extended flexibility and easy installation
– Low flicker light thanks to special electronic control gear
– Good glare reduction (UGR < 19)

BIOLUX HCL LED STRIP KIT UNPROTECTED
– Set products: 1 × LED Strip Superior 2000 lm/m TW (4058075436084), OTi Dali driver 160W/220-240/242CHDT6 (4062172177948); Zigbee Dali converter (4062172044776) with strain relief ECO CI KIT (4008321392091)

BIOLUX HCL LED STRIP KIT PROTECTED
– Set products: 1 × LED Strip Superior 2000 lm/m TW/IP67 (4058075436008), OTi Dali driver 160W/220-240/242CHDT6 (4062172177948); Zigbee Dali converter (4062172044776) with strain relief ECO CI KIT (4008321392091)

VIVARES HCL CONTROL

VIVARES HCL Zigbee:
– Controller incl. HCL curve, page 18
– Sensor, page 20
– Pushbutton coupler, page 21

VIVARES HCL DALI:
– Controller incl. HCL curve, page 34
– Sensor, page 35 or 45
– Pushbutton coupler, page 46

Product name	Segmentation	GTIN (EAN)	Replacement for	W	lm	lm/W	K	t[h] [1]	∠°	UGR	FLICKER VALUE	L × W × H [mm] Ø × H [mm]	new EAN in 2023
BIOLUX HCL PANEL ZIGBEE											CRI ≥90 · IP20 · zigbee · 5 YEARS		
BIOLUX HCL PL 600 S 40W TW ZB	■	4058075**724549**	4 × 18 W / 4 × 14 W FL	40	4 400	110	2 700…6 500	50 000	90	< 19	< 1 %	595 × 595 × 11	
BIOLUX HCL PL 625 S 40W TW ZB	■	4058075**724563**	4 × 18 W / 4 × 14 W FL	40	4 400	110	2 700…6 500	50 000	90	< 19	< 1 %	620 × 620 × 11	
BIOLUX HCL PL 1200 S 37W TW ZB	■	4058075**724587**	3 × 18 W / 3 × 14 W FL	37	4 100	110	2 700…6 500	50 000	90	< 19	< 1 %	1 195 × 295 × 11	
BIOLUX HCL DOWNLIGHT ZIGBEE											CRI ≥90 · IP20 · zigbee · 5 YEARS		
BIOLUX HCL DL DN150 ZB 20W 2700-6500K	■	4058075**400733**	2 × 26 W CFLi	20	1 800	90	2 700…6 500	50 000	60	< 19	< 1 %	175.4 × 98.9	4058075**724600**
BIOLUX HCL PANEL DALI											CRI ≥90 · IP20 · DALI · 5 YEARS		
BIOLUX HCL PL 600 S 41W TW DALI	■	4058075**636934**	4 × 18 W / 4 × 14 W FL	41	4 200	102	2 700…6 500	50 000	80	< 19	< 1 %	595 × 595 × 11	
BIOLUX HCL PL 625 S 41W TW DALI	■	4058075**636958**	4 × 18 W / 4 × 14 W FL	41	4 200	102	2 700…6 500	50 000	80	< 19	< 1 %	620 × 620 × 11	
BIOLUX HCL PL 625 S 41W TW DALI CSW	■	4058075**636972**	4 × 18 W / 4 × 14 W FL	41	4 200	102	2 700…6 500	50 000	80	< 19	< 1 %	620 × 620 × 11	
BIOLUX HCL LED STRIP KIT Unprotected											CRI ≥90 · IP00 · DIM · zigbee · 5 YEARS		
BIOLUX HCL LS S TW ZB KIT	■	4058075**671270**	–	108	9 140	76	2 700…6 500	50 000	120	–	–	5 000 × 10 × 1.2	
BIOLUX HCL LED STRIP KIT Protected											CRI ≥90 · IP67 · DIM · zigbee · 5 YEARS		
BIOLUX HCL LS S TW IP67 ZB KIT	■	4058075**671294**	–	108	8 450	79	2 700…6 500	50 000	120	–	–	5 000 × 12 × 5	

Further information about the VIVARES HCL products can be found at
**ledvance.com/HCL
ledvance.com/hclproducts**

■ SUPERIOR CLASS   ■ PERFORMANCE CLASS   ■ VALUE CLASS

[1] t [h]: L70/B50 @ 25 °C (Ta)
[2] Refer to www.ledvance.com/guarantee for precise conditions

OLD BUILDING –
MODERN LIGHTING
WITH VIVARES ZIGBEE

The historic office building of Valda & Partner in Winterthur in Switzerland needed to be equipped with contemporary lighting. With the help of the wireless VIVARES Zigbee light management system, a highly efficient, flexible and user-friendly lighting solution could be implemented.

Innovative lighting technology in historic building.

THE CHALLENGE

More efficiency, more brightness and a pleasant atmosphere for employees and visitors in any situation. Those were the objectives for modernizing the lighting system in the offices of construction company Valda & Partner. At the same time, low ceiling heights and strict requirements for monument protection called for a space-saving, flexible lighting system.

Space-saving, efficient, user-friendly –
the BIOLUX HCL PANEL Zigbee.

THE SOLUTION

The intelligent VIVARES Zigbee light management system from LEDVANCE met all the requirements. The wireless system made cabling using additional control lines unnecessary, so no structural alterations were needed in the listed building. In addition to quick installation and easy commissioning, the system also boasts easy handling and optimized light and energy use. A total of 13 BIOLUX HCL PANEL Zigbee luminaires, 3 VIVARES Zigbee sensors, 3 VIVARES Zigbee couplers and 1 VIVARES Zigbee controller were installed. The panel luminaires were mounted on the ceiling using the LEDVANCE PANEL SURFACE MOUNT KIT.

"The conversion was a complete success. The goals we wanted to achieve with the new lighting have even been exceeded: The new light makes work easier and our employees feel fitter and happier overall."

Thomas Valda,
CEO Valda & Partner GmbH, Winterthur

THE BENEFITS

The modern LED panels according to DIN standards replace conventional floor luminaires at Valda & Partner which creates more space and makes working at computer screens more pleasant. And whether it's a customer presentation or lunch – the easy-to-select light profiles of the VIVARES system allow the lighting to be flexibly adapted to the respective situation at any time. What's more, the lighting quality and intensity in the rooms have been improved significantly from Ø 300 lux to Ø 700 lux. And thanks to transparent energy monitoring via the VIVARES cloud service, Valda & Partner always have costs under control.

SUMMARY

Construction company Valda & Partner GmbH wanted to modernize the lighting in its offices in a listed building in Winterthur with an efficient, flexible and interactive light management system. LEDVANCE had the ideal solution: the wireless VIVARES Zigbee including BIOLUX LED panels. The system offers comfortable handling, efficient energy use, automatic adjustment of the lighting level to daylight and individually adjustable light profiles. Since the modernization, the quality of light has improved noticeably and the offices have become much more versatile.

Customer meetings, focusing on a presentation or a relaxed team event – the individually selectable light profiles provide appropriate lighting.

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
– Error message by email if driver temperatures are too high, the DALI line is faulty or the control gear is defective
– 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
— Turn on all installed products and connect to the internet

START REGISTRATION

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

ORDER FORM

Enter the required information in the order form

SERVICES FOR EVEN MORE EFFICIENT OPERATION
WITH THE DASHBOARD AS A CENTRAL TOOL

Thanks to the optional VIVARES cloud services, you and your customers can keep an eye on all the system data remotely – anytime, anywhere.

Energy monitoring provides detailed insights into the energy consumption of the lighting system. This allows you to take additional measures to further reduce costs such as optimizing the sensor settings, for example. The maintenance assistant provides predictive, cost-effective, and reliable maintenance by informing you of the status of the system and all its individual components. The dashboard is the central tool that allows you to use all services and access all data.
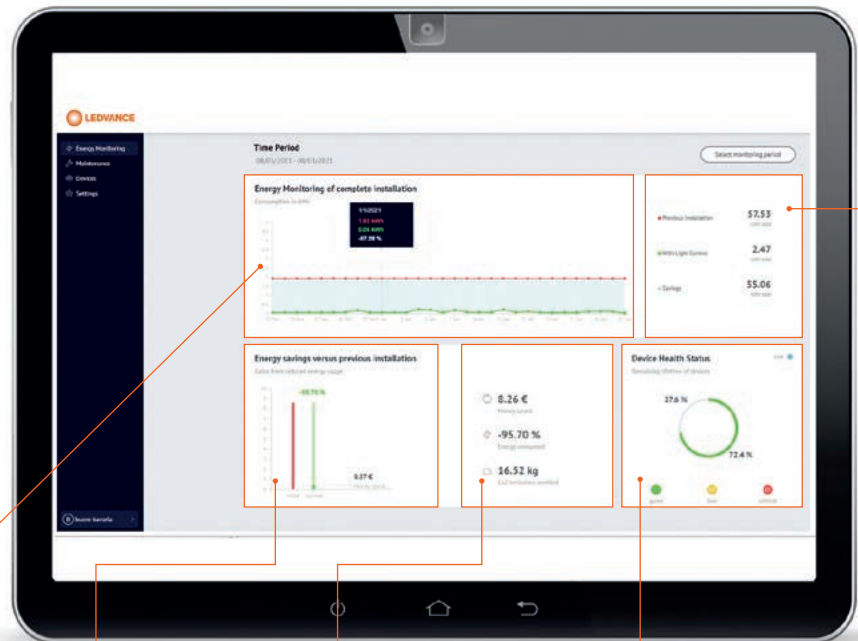
The graphic shows the energy consumption of the system

Overview of cost savings, energy consumption and CO$_2$ emissions

Energy consumption of the system

The system status shows the remaining lifetime and the status of the installed lighting in the project

Display of energy consumption from previous systems and savings from new ones

This service is not required for operating the VIVARES systems. It is an optional service that offers you additional possibilities.

RECEIVE CONFIRMATION

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.

NEED ANY HELP?

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

FREE TRIAL ACCESS

Would you like to learn more about our cloud services – with no strings attached? Then take advantage of our free trial.

VIVARES ZIGBEE:
FUNCTIONALITY, INSTALLATION AND OPERATION

THE KEY COMPONENT OF VIVARES ZIGBEE IS THE CONTROLLER

The VIVARES Zigbee controller 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 and LED strips. Potential applications range from small lighting projects to complete floor solutions. 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. 16). And it can also be maintained remotely using the VIVARES Portal or the mobile app. New software features are constantly made available through online updates and can be integrated into the system as required. But it doesn't need an internet connection for commissioning and operation.

FUTURE-PROOF OPTIONS

Thanks to its gateway function, the controller also allows you to use the optional cloud services to generate maintenance and energy consumption reports.

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

LEDVANCE VIVARES CLOUD SERVICES

VIVARES ZB SENSOR

VIVARES ZB PUSHBUTTON COUPLER

VIVARES ZB CONTROL

VIVARES PORTAL

LEDVANCE PRODUCTS

DALI-2 LUMINAIRES

ZIGBEE-DALI CONVERTER
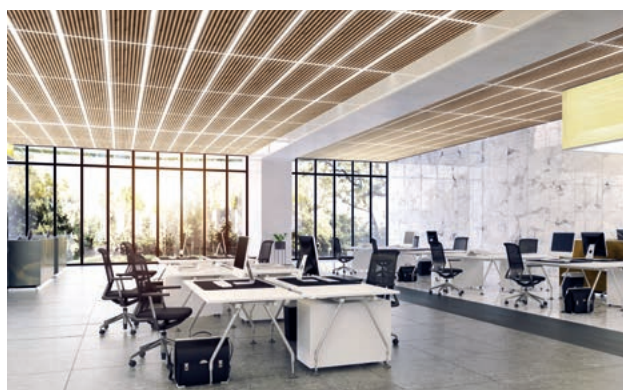
zigbee

GOOD REASONS FOR CHOOSING VIVARES ZIGBEE:

– Ideal for modernizing existing buildings where no rewiring is needed or possible
– 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

VIVARES ZIGBEE IN USE

Application	L/O sensor[1]	O sensor[2]	Function	Setting	Pushbutton coupler	Function	Arrangement
Open-plan office	✔	–	Daylight control and presence detection	Sensor delay 5 min. Daylight control active	✔	ON/OFF/DIM/scenes	One sensor per luminaire group (workplace)
Meeting room	✔	✔	Optional daylight control (e.g. for rooms with glass walls) and presence detection	Sensor delay 5 min. Daylight control active	✔	ON/OFF/DIM/scenes	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.)
Restrooms	–	✔	Motion and presence detection	Sensor delay 5 min.	✔	ON/OFF	A separate sensor for each toilet cubicle. Other than that, cover the entrance areas and common areas (sinks, urinals, etc.).
Kitchen	✔	–	Motion and presence detection	Sensor delay 5 min. Daylight control active	✔	ON/OFF/DIM	Cover areas by the window with L/O sensor (same requirement as for open-plan offices)
Corridor	✔	✔	Motion and presence detection	Sensor delay 5 min.	✔	ON/OFF/DIM	
Warehouse, lab, etc.	✔	✔	Motion and presence detection	Sensor delay 5 min.	✔		

Project size	up to 200 devices			
Distance from Zigbee 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 (light and presence sensor) | [2] O = occupancy (presence sensor)

LEDVANCE SERVICES FOR PROFESSIONALS

Our experts are happy to support you in planning and implementing your light management system. Just get in touch at:
contact@ledvance.com

Visit us at:

ledvance.com/vivares   ledvance.com/zigbeevideos

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 VIVARES 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!

The VIVARES Zigbee installation video (ledvance.com/zigbeevideos) shows you how easy it is to commission the system components. Be inspired!

FROM PROJECT PLANNING TO OPERATION IN 5 STEPS

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

Free download:
Apple Store for iOS

Free download:
Google Play for Android

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

3. ORDER
— Download the parts list from the VIVARES Portal
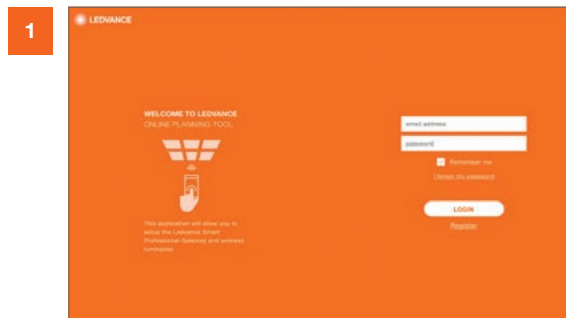— Order the products through the trade partner

4. COMMISSIONING
— Download the QR code installation booklet
— Install the luminaires/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 via a local network or the internet
— Upload the preconfiguration from step 2 to the VIVARES Zigbee controller
— The network is set up automatically in the background

5. FINALIZE AND OPERATE
— Test the lighting system and get customer acceptance
— Maintain the installation remotely
— Optional VIVARES cloud services: create maintenance and energy consumption reports (p. 12)
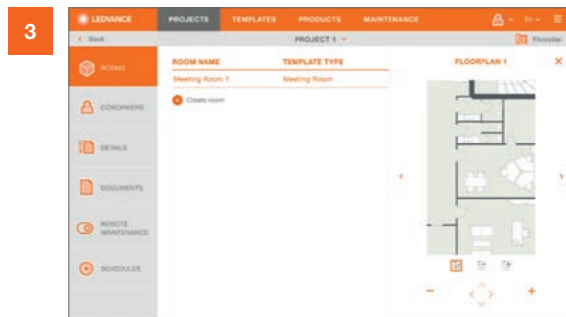
INTUITIVE AND SELF-EXPLANATORY:
WORKING WITH THE VIVARES PORTAL

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
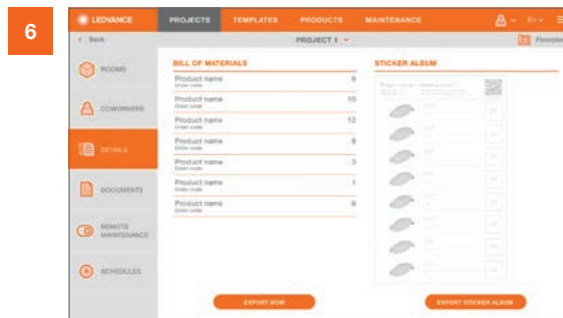
Parts list and QR code installation booklet

7

Scan the QR codes
using a mobile device
and the VIVARES app

8

Upload the precon-
figuration to the
VIVARES controller

9

Remote access for post installation adjustments

Have any questions cropped up on the construction site?
Contact our hotline via the VIVARES Portal – we're here to help.

CONTROLLER ZIGBEE

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

zigbee | SCALE DESIGN | IP 20 | LEDVANCE 5 year guarantee [1]

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
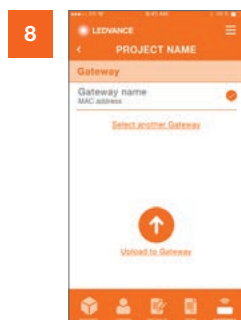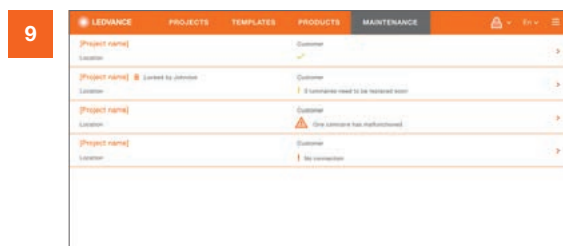
PRODUCT BENEFITS

— 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 rewiring 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

90

90   26

TECHNICAL DATA
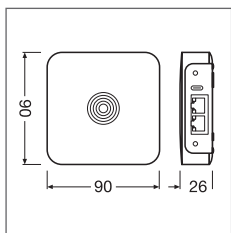
Product name	GTIN (EAN)	V$_{IN}$	Hz	I$_{IN}$	Ta		COLOR	L × W × H [mm] Ø × H [mm]
VIVARES ZB CONTROL	4058075427488	5	0	1	−20…+45 °C	Mounting/Wall/ Mounting/Ceiling	Signal white	90 × 90 × 26

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

18

SENSOR ZIGBEE

Zigbee 3.0 light and presence sensor, ceiling integration

zigbee **IP 20** **LEDVANCE 5 year guarantee** [1]

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

h	2.5	3.0	3.5	4.0	5.0
A	3.5	4.5	4.5	4.0	–
B	6.5	7.5	8.0	8.5	9.0

FITTING COMPONENTS

VIVARES ZB SENS ADAPTER
4058075650107

Zigbee Sensor adapter for surface mounted ceiling installation

TECHNICAL DATA

Product name	GTIN (EAN)	V$_{IN}$	Hz			Lx	$\frac{h}{m}$	Ta		COLOR	L × W × H [mm] Ø × H [mm]
VIVARES ZB L/O SENS 220-240	4058075446182	220–240	50/60	90°	7 m	10…2 000	2…5	−20…+50 °C	Recessed	White	85 × 85 × 64

[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.

VIVARES ZIGBEE
COMMISSIONING
LMS COMPONENTS
LIGHTING
CASE STUDY

SENSOR ZIGBEE

Zigbee 3.0 presence sensor, ceiling integration

zigbee **IP20** **5** year **guarantee** LEDVANCE [1]

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
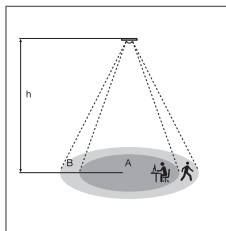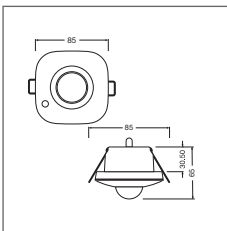— Mounting height: 2…5 m

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

Detection area of the sensor in meter

h	2.5	3.0	3.5	4.0	5.0
A	3.5	4.5	4.5	4.0	–
B	6.5	7.5	8.0	8.5	9.0

FITTING COMPONENTS

VIVARES ZB SENS ADAPTER
4058075650107

Zigbee Sensor adapter for surface mounted ceiling installation

TECHNICAL DATA

Product name	GTIN (EAN)	V$_{IN}$	Hz			Lx	lh m	Ta		COLOR	L × W × H [mm] Ø × H [mm]
VIVARES ZB O SENS 220-240	4058075**544222**	220–240	50/60	90°	7 m	–	5	−20…+50 °C	Re-cessed	White	85 × 85 × 64

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

CONTROL ELEMENT ZIGBEE

Zigbee 3.0 pushbutton coupler to integrate standard switches into a wireless lighting system

zigbee **IP 20** **LEDVANCE 5 year guarantee** [1]

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 scences
— 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
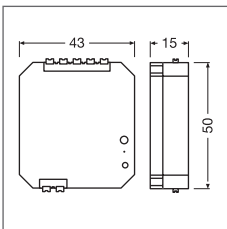
TECHNICAL DATA

Product name	GTIN (EAN)	V_{IN}	Hz	Ta	🔧	NO. OF OUTPUTS	L × W × H [mm] Ø × H [mm]
VIVARES ZB COUPLER	4058075**463806**	100–240	50/60	−20…+50 °C	Recessed	4	50 × 43 × 15

VIVARES ZIGBEE

COMMISSIONING

LMS COMPONENTS

LIGHTING

CASE STUDY

ZIGBEE 3.0 DALI CONV LI

Converter to integrate DALI luminaires into Zigbee-based control systems

zigbee · DALI · IP 20

PRODUCT FEATURES

— Integrated Zigbee transceiver module
— DALI interface for addressed or broadcast operation
— Outputs with electronical 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
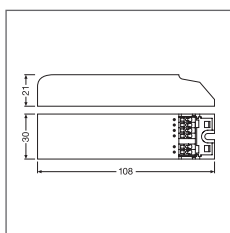
TECHNICAL DATA

Product name	GTIN (EAN)	V$_{IN}$	Hz	Ta	🔧	NO. OF OUTPUTS	L × W × H [mm] Ø × H [mm]
Zigbee 3.0 DALI CONV LI	4062172044776	220–240	50/60	− 20…+ 60 °C	Luminaire integration/ Independent mounting	1	108 × 30 × 21

OSRAM

VIVARES ZIGBEE · COMMISSIONING · LMS COMPONENTS · LIGHTING · CASE STUDY

SMART⁺ ZIGBEE PLUG

Plug to integrate luminaires into Zigbee-based control systems

PRODUCT FEATURES

— High switching power: up to 3 680 W / 16 A
  EU version and 2 990 W / 13 A UK version
— Functionality depends on used type of
  control
— Network protocol: Zigbee

PRODUCT BENEFITS

— Enables switching of conventional
  light sources and other electric
  devices
— Simple connection of electric
  devices via standard socket

FURTHER PRODUCT DETAILS
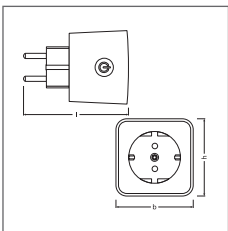
SMART PLUG FOR ON/OFF CONTROL OF DEVICES

– Standby power savings for coffee ma-
  chines, charging stations, monitors, etc.
– Control of lights or other devices, such
  as LEDVANCE UV-C DISINFECTION,
  with time schedules e.g. operation
  from 8:00 – 20:00

TECHNICAL DATA

Product name	GTIN (EAN)	PRO-TECTION CLASS	A MAX	COLOR	IP	L × W × H [mm] Ø × H [mm]	new EAN in 2023
SMART+ ZB PLUG EU	4058075**208315**	I	16	white	IP20	84 × 60 × 60	4058075**729261**

LUMINAIRES

PANEL INDIVILED ZIGBEE
– 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

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

PANEL PERFORMANCE ZIGBEE
– Suitable luminaire for VIVARES and other Zigbee 3.0 Light Management Systems
– Energy savings thanks to high system efficacy: up to 120 lm/W
– Tool-free electrical connection due to push button connector
– Through-wiring possible with included connector box

Product name	Segmentation	GTIN (EAN)	Replacement for	W	lm	lm/W	K	$t_{[h]}$ [1]	∢°	UGR	FLICKER VALUE	L × W × H [mm] Ø × H [mm]	new EAN in 2023
PANEL IndiviLED Zigbee													
PANEL INDV 600 33W 4000 K ZBVR	■	4058075**521841**	4 × 18 W/4 × 14 W FL	33.0	4 000	120	4 000	80 000	70	< 16	< 10 %	595 × 595 × 13	–
PANEL INDV 625 33W 4000 K ZBVR	■	4058075**521865**	4 × 18 W/4 × 14 W FL	33.0	4 000	120	4 000	80 000	70	< 16	< 10 %	620 × 620 × 13	–
PANEL Performance UGR < 19 Zigbee													
PL PFM 600 36 W 4000 K UGR19 ZBVR	■	4058075**522862**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	90	< 19	< 5 %	595 × 595 × 32	4099854**014239**
PL PFM 625 36 W 4000 K UGR19 ZBVR	■	4058075**522886**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	90	< 19	< 5 %	620 × 620 × 32	4099854**014802**
PANEL Performance Zigbee													
PL PFM 600 36 W 4000 K ZBVR	■	4058075**522824**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	120	< 22	< 5 %	595 × 595 × 32	4099854**015076**
PL PFM 625 36 W 4000 K ZBVR	■	4058075**522848**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	120	< 22	< 5 %	620 × 620 × 32	4099854**014468**

PANEL ACCESSORIES – QUICK AND EASY TO INSTALL

Whether it's surface mounting, pendant mounting or installation in suspended ceilings, the LEDVANCE panel luminaires can be fitted in many different ways. Clever mounting systems, extensive accessories and complete installation kits make the job extremely easy for you. You can find our accessories at:
ledvance.com/panel-accessories

Further information about the VIVARES products can be found at
ledvance.com/vivaresproducts

■ SUPERIOR CLASS   ■ PERFORMANCE CLASS   ■ VALUE CLASS

[1] t [h]: L70/B50 @ 25 °C (T$_a$)
[2] Refer to www.ledvance.com/guarantee for precise conditions

LUMINAIRES

PANEL DIRECT/INDIRECT
1200 UGR < 19 ZIGBEE
– 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

LINEAR INDIVILED DIRECT ZIGBEE
– 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

DOWNLIGHT UGR19 ZIGBEE
– 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

Product name	Segmentation	GTIN (EAN)	Replacement for	W	lm	lm/W	K	t[h] [1]	°	UGR	FLICKER VALUE	⌀	L × W × H [mm] ⌀ × H [mm]
PANEL DIRECT/INDIRECT 1200 UGR < 19 Zigbee											CRI ≥80 / IP20 / DIM / zigbee		5 YEARS GUARANTEE [2]
PANEL D/I 1200 36 W 4000 K UGR19 ZBVR	■	4058075**521889**	2 × 58 W FL	36.0	4 000	110	4 000	80 000	110	< 19	< 10 %	–	1 200 × 300 × 16
LINEAR IndiviLED DIRECT Zigbee											CRI >80 / IP20 / DIM / zigbee		5 YEARS GUARANTEE [2]
LN INDV D 1200 34 W 4000 K ZBVR	■	4058075**521902**	2 × 28 W FL	34.0	4 200	125	4 000	60 000	70	< 16	< 10 %	–	1 199 × 120 × 40
LN INDV D 1500 48 W 4000 K ZBVR	■	4058075**521926**	2 × 49 W FL	48.0	5 700	120	4 000	60 000	70	< 16	< 10 %	–	1 488 × 120 × 40
DOWNLIGHT UGR19 Zigbee											CRI ≥80 / IP20 IP54 / DIM / zigbee		5 YEARS GUARANTEE [2]
DL UGR19 PFM DN155 14 W 840 WT IP54 ZBVR	■	4058075**459892**	1 × 26 W CFLi	14.0	1 600	115	4 000	70 000	65	< 19	< 10 %	155	180 × 65
DL UGR19 PFM DN195 21 W 840 WT IP54 ZBVR	■	4058075**459397**	2 × 26 W CFLi	21.0	2 520	120	4 000	70 000	65	< 19	< 10 %	195	220 × 82

Further information about the VIVARES products can be found at
ledvance.com/vivaresproducts

■ SUPERIOR CLASS   ■ PERFORMANCE CLASS   ■ VALUE CLASS

[1] t [h]: L70/B50 @ 25 °C (Tₐ)
[2] Refer to www.ledvance.com/guarantee for precise conditions

VIVARES ZIGBEE

COMMISSIONING

LMS KOMPONENTEN

LIGHTING

CASE STUDY

SMART⁺ LAMPS

SMART⁺ ZIGBEE CLASSIC DIMMABLE
Classic A bulb shape with Zigbee technology

SMART⁺ ZIGBEE CLASSIC TUNABLE WHITE
Classic A bulb shape with Zigbee technology

SMART⁺ ZIGBEE CANDLE DIMMABLE
Classic B candle shape with Zigbee technology

SMART⁺ ZIGBEE CANDLE TUNABLE WHITE
Classic B candle shape with Zigbee technology

SMART⁺ ZIGBEE MINI BULB DIMMABLE
Classic P mini bulb shape with Zigbee technology

SMART⁺ ZIGBEE MINI BULB TUNABLE WHITE
Classic P mini bulb shape with Zigbee technology

SMART⁺ ZIGBEE SPOT GU10 DIMMABLE
LED retrofit reflector lamps with smart home technology, dimmable, PAR16

SMART⁺ ZIGBEE SPOT GU10 TUNABLE WHITE
LED retrofit reflector lamps with smart home technology, color temperature adjustable, PAR16

SMART⁺ ZIGBEE FILAMENT CLASSIC DIMMABLE
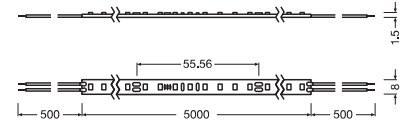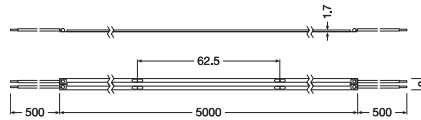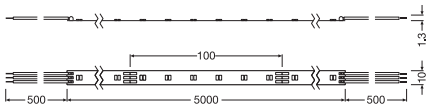Classic bulb shape with filament-style with Zigbee technology

Product name	GTIN (EAN)	Replacement for[1]	W	lm	≋	EEC[2]	K	t[h][3]	I [mm]	Ø d [mm]	new EAN in 2023
SMART+ Zigbee Classic Dimmable											DIM zigbee
SMART+ ZB Classic 60 60 9W/2700K E27	4058075**728981**	60.0	9.0	806	E27		2 700	20 000	112	60	
SMART+ Zigbee Classic Tunable White											WARM COOL DIM zigbee
SMART+ ZB Classic 60 60 9W/2700...6500K E27	4058075**208384**	60.0	9.0	806	E27		2 700…6 500	20 000	112	60	4058075**729001**
SMART+ Zigbee Candle Dimmable											DIM zigbee
SMART+ ZB Candle 40 5W/2700K E14	4058075**729063**	40.0	4.9	470	E14		2 700	20 000	107	37	
SMART+ Zigbee Candle Tunable White											WARM COOL DIM zigbee
SMART+ ZB Candle 40 5W/2700K..6500K E14	4058075**208414**	40.0	4.9	470	E14		2 700…6 500	20 000	107	37	4058075**729087**
SMART+ Zigbee Mini Bulb Dimmable											DIM zigbee
SMART+ ZB Mini bulb 40 5W/2700K E14	4058075**729100**	40.0	4.9	470	E14		2 700	20 000	93	45	
SMART+ Zigbee Mini Bulb Tunable White											WARM COOL DIM zigbee
SMART+ ZB Mini bulb 40 5W/2700K...6500K E14	4058075**485174**	40.0	4.9	470	E14		2 700…6 500	20 000	93	45	4058075**729124**
SMART+ Zigbee Spot GU10 Dimmable											DIM zigbee
SMART+ ZB Spot 50 4,7W/2700K 45° GU10	4058075**729148**	50.0	4.7	350	GU10		2 700	20 000	54	50	
SMART+ Zigbee Spot GU10 Tunable White											WARM COOL DIM zigbee
SMART+ ZB Spot 50 4,7W/2700K...6500K 45° GU10	4058075**208438**	50.0	4.7	350	GU10		2 700…6 500	20 000	54	50	4058075**729162**
SMART+ Zigbee Filament Classic Dimmable											DIM zigbee
SMART+ ZB Classic A52 GOLD 6W /2400K E27	4058075**729209**	52.0	6.0	680	E27		2 400	15 000	106	60	

Further information about the VIVARES products can be found at
ledvance.com/vivaresproducts
ledvance.com/lamps

[1] Wattage of the conventional lamp to be replaced
[2] Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)
[3] Average lifespan in hrs

LED STRIPS

LED STRIP SUPERIOR-2000 TW

– Great design freedom thanks to long, flexible TW LED Strips
– Easy installation and tool-free connection
– Simple installation thanks to adhesive tape
– Maximum flexibility thanks to a wide range of accessories
– Simple connection thanks to integrated cables on both sides

LED STRIP PERFORMANCE COB-1000

– Excellent homogenous light, without visible light points thanks to COB technology
– Great design freedom thanks to the flexibility and cuttability of the module
– Easy mounting on many smooth surfaces with self-adhesive tape on the back
– Simple connection thanks to integrated cables on both sides

LED STRIP PERFORMANCE CLASS

– Great scope of design options due to long and flexible LED strips
– Easy installation, no tools required for connection
– Easy mounting on many smooth surfaces thanks to self-adhesive tape
– Maximum flexibility due to large range of accessories
– Simple connection thanks to integrated cables on both sides

Product name	Segmentation	GTIN (EAN)	K	lm METER	lm	W METER	W	lm/W	METER	PITCH [mm]	Ta	L×W×H [mm]	I min [mm]
LED STRIP SUPERIOR-2000 TW													
LS SUP-2000/TW/927-965/5	■	4058075436084	2700…6500	1700	9140	21.6[5]	108.0	79.0	120	16.67	−20…+55°C	5000×10.0×1.2	100.0
LED STRIP PERFORMANCE COB-1000													
LS PFM-1000/COB/927/5	■	4058075597525	2700	1010[4]	2850	11.0[4]	38.0	92.0[4]	384	−	−20…+55°C	5000×8.0×1.7	62.5
LS PFM-1000/COB/930/5	■	4058075597532	3000	1010[4]	3100	11.0[4]	38.0	95.0[4]	384	−	−20…+55°C	5000×8.0×1.7	62.5
LS PFM-1000/COB/940/5	■	4058075597549	4000	1040[4]	3300	11.0[4]	38.0	97.0[4]	384	−	−20…+55°C	5000×8.0×1.7	62.5
LS PFM-1000/COB/965/5	■	4058075597556	6500	1060[4]	3500	11.0[4]	38.0	98.0[4]	384	−	−20…+55°C	5000×8.0×1.7	62.5
LED STRIP PERFORMANCE CLASS													
LS P-500/927/5	■	4058075707474	2700	505	2265	4.2	21.0	120.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-500/930/5	■	4058075707498	3000	515	2310	4.2	21.0	122.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-500/940/5	■	4058075707511	4000	545	2455	4.2	21.0	130.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-500/965/5	■	4058075707535	6500	545	2455	4.2	21.0	130.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1000/927/5	■	4058075707559	2700	1010	4645	8.6	43.0	118.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1000/930/5	■	4058075707573	3000	1030	4730	8.6	43.0	120.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1000/940/5	■	4058075707597	4000	1090	5030	8.6	43.0	127.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1000/965/5	■	4058075707610	6500	1090	5030	8.6	43.0	127.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1500/927/5	■	4058075707634	2700	1435	6480	12.0	60.0	119.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1500/930/5	■	4058075707658	3000	1455	6600	12.0	60.0	121.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1500/940/5	■	4058075707672	4000	1550	7020	12.0	60.0	129.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-1500/965/5	■	4058075707696	6500	1550	7020	12.0	60.0	129.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-2000/927/5	■	4058075707719	2700	1840	8420	15.6	78.0	118.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-2000/930/5	■	4058075707733	3000	1870	8580	15.6	78.0	120.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-2000/940/5	■	4058075707757	4000	1980	9125	15.6	78.0	127.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56
LS P-2000/965/5	■	4058075707771	6500	1980	9125	15.6	78.0	127.0	144	6.94	−20…+55°C	5000×8.0×1.5	55.56

Further information about the VIVARES products can be found at
ledvance.com/vivaresproducts
ledvance.com/ledstripproducts

■ SUPERIOR CLASS ■ PERFORMANCE CLASS ■ VALUE CLASS

[1] LED Strip TW: L70/B50 at T_c max. 85 °C / LED Strip COB: L70/B50 at T_c max. 65 °C / LED Strip PFM: L70/B50 at T_a 55 °C
[2] Dimmable with suitable drivers, see also www.ledvance.com/dim
[3] Refer to www.ledvance.com/guarantee for precise conditions
[4] Value based on first meter of the product
[5] 10.8 W for 2700 K, 10.8 W for 6500 K

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ENERGY-RELATED RENOVATION
WITH EFFICIENT LIGHT MANAGEMENT

By installing the VIVARES ZIGBEE and BIOLUX HCL systems, Harald Meyer Installationen GmbH has optimized the working conditions for its employees, saving energy costs and benefiting from state subsidies for energy-related renovation.

THE CHALLENGE

Harald Meyer Installationen GmbH wanted to replace the entire lighting system in its office building in Sittensen with an efficient, intelligent lighting solution. For planning and implementing the project, it was necessary to take into account the old building's structural conditions and its outdated electrical system. The criteria for funding under the KfW 276 energy efficiency program and the federal funding for efficient buildings (BEG) also had to be met.

Modern VIVARES Zigbee light management system – installed in the old office building.

THE SOLUTION

To meet the requirements of the funding programs, the lighting concept from LEDVANCE relies on sensor-controlled light management systems. They increase the quality of light, allow the lighting to be adapted to different work situations and reduce energy costs. The VIVARES Zigbee wireless light management system is used in the open-plan office in combination with LED panels. In meeting rooms and individual offices with little daylight, BIOLUX HCL with its dynamic changes of light boosts well-being and performance. LED downlights paired with motion detectors illuminate the reception area, corridors and toilets.

THE BENEFITS

A modern, efficient and sensor-controlled lighting solution was implemented in every area of the office building thanks to VIVARES Zigbee, BIOLUX HCL or the simple combination of luminaires and motion sensors – all matched to the conditions and user needs. What's more, the wireless VIVARES Zigbee allows for the lighting to be modernized regardless of the outdated electrical equipment in the office building. And the new lighting concept also meets the requirements for the use of state subsidies.

Energy-efficient downlight luminaires at reception.

"Based on our previous successful collaboration we were happy to choose LEDVANCE again. And rightly so because the efficient and intelligent lighting concept has played a decisive role in the successful energy-related renovation of our office building."

Mark Meyer,
Managing Director of Harald Meyer Installationen GmbH, Sittensen

SUMMARY

Harald Meyer Installationen GmbH wanted to refurbish its old office building in Sittensen with efficient, intelligent lighting and use state subsidies for it. LEDVANCE implemented the project with a sustainable lighting concept that reduces energy costs and meets all the requirements of workplace regulations and the KFW 276 and BEG state subsidy programs. It also optimizes the quality of light and supports employee well-being and performance.

Downlights in the corridors of the office building.

VIVARES DALI:
## FUNCTIONALITY, INSTALLATION AND OPERATION

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

VIVARES DALI: IOT-READY AND COMPATIBLE WITH MANY DALI-2 PRODUCTS

LEDVANCE VIVARES CLOUD-SERVICES

PUSHBUTTON COUPLER

SENSOR

OSRAM DALI PRO 2 IoT

OSRAM DALI PRO 2 COMMISSIONING APP

LEDVANCE PRODUCTS

At the heart of LEDVANCE VIVARES DALI is the OSRAM DALI PRO 2 IoT controller. The system connects DALI-2 components – for example sensors, pushbutton couplers and 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.

In the DALI PC tool, up to 8 DALI PRO 2 IoT controllers can be connected in one network via LAN Interconnect, so up to 1 024 luminaires and 1 008 input devices in total. Predefined templates and drag & drop enable time-saving and intuitive commissioning. The DALI PRO 2 IoT controller is equipped with an integrated gateway and provides optional access to LEDVANCE cloud services or a third-party cloud via an API interface.

The VIVARES DALI system can also be integrated into a higher-ranking KNX system for building control using a KNX interface. This means that automated tests including reporting can be carried out on any emergency lighting system. The DALI PC tool can also be used to maintain the system remotely.
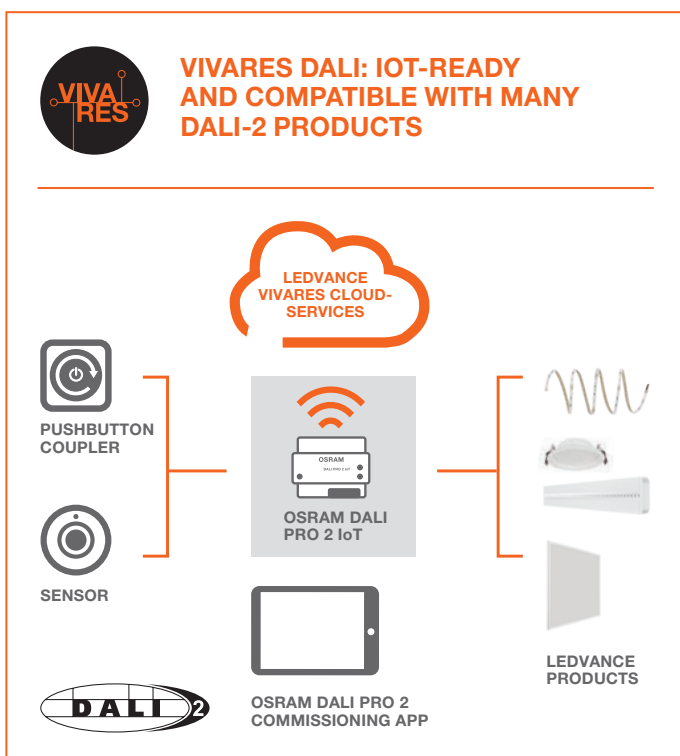
GOOD REASONS FOR CHOOSING VIVARES DALI:

– 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
– Automated tests on emergency lighting system including reports

VIVARES DALI IN USE

Application profiles	LS/PD sensor[1]	P sensor[2]	Function	Setting	Pushbutton coupler	Function	Arrangement
Open-plan offices	✔	✔	Daylight control and presence detection or motion and presence detection	Adjustable sensor delay and dimming speed, automatic calibration to adapt to the place of installation	✔	ON/OFF/ DIM scenes	For each luminaire group with, for example, four desks one sensor is used to control this area.
Multi-person offices	✔	✔	Daylight control and presence detection or motion and presence detection	Adjustable sensor delay and dimming speed, automatic calibration to adapt to the place of installation	✔	ON/OFF/ DIM scenes	For each luminaire group with, for example, four desks one sensor is used to control this area.
Standard rooms	–	✔	Motion and presence detection	Adjustable sensor delay and dimming speed	✔	ON/OFF/ DIM	For each luminaire group with, for example, four desks one sensor is used to control this area.
Conference rooms	–	✔	Motion and presence detection	Adjustable sensor delay and dimming speed	✔	ON/OFF/ DIM scenes	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.
Restrooms	–	✔	Motion and presence detection	Adjustable sensor delay and dimming speed	✔	ON/OFF	A separate sensor is fitted for each toilet cubicle. Other than that, cover the entrance areas and common areas (sinks, urinals, etc.).
Corridors & stairs	–	✔	Motion and presence detection	Adjustable sensor delay and dimming speed	✔	ON/OFF/ 2step DIM	Long corridors or stairwells
Reception	–	✔	Motion and presence detection	Adjustable sensor delay and dimming speed	✔	ON/OFF/ 2step DIM	Reception desk with waiting area

Project size	2 DALI channels for up to 128 DALI luminaires and components (sensors, couplers). Up to 8 DALI PRO 2 IoT controllers via LAN Interconnect, 1 024 luminaires and 1 008 input devices via DALI PC tool.
Installation tools	mobile device (smartphone, notebook or tablet)
WebGui Ssoftware	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 (light and presence sensor) | [2] P = presence (presence sensor)
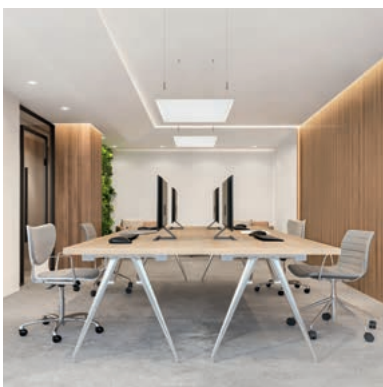
LEDVANCE SERVICES FOR PROFESSIONALS

Our experts are happy to support you in planning and implementing your light management system. Just get in touch at:
vivares-support@ledvance.com

Visit us at:

ledvance.com/vivares

ledvance.com/dalivideos

Products of OSRAM GmbH, distributed by LEDVANCE

OSRAM

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VIVARES DALI

COMMISSIONING

LMS COMPONENTS

LIGHTING

CASE STUDY

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.

Our YouTube installation video (ledvance.com/dalivideos) shows you how easy and intuitive it is to set up your VIVARES DALI system using the commissioning tool. Discover the possibilities!

FROM PROJECT PLANNING TO OPERATION IN 5 STEPS

1. PLAN LIGHTING SYSTEM AND ORDER PRODUCTS
Find out more about planning VIVARES DALI from page 30.

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)
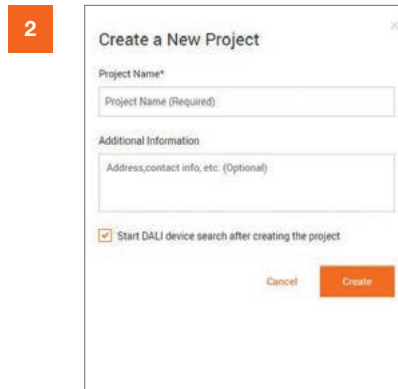— Synchronize and save to DALI PRO

5. FINALIZE AND OPERATE
— Test the lighting system
— Get customer acceptance
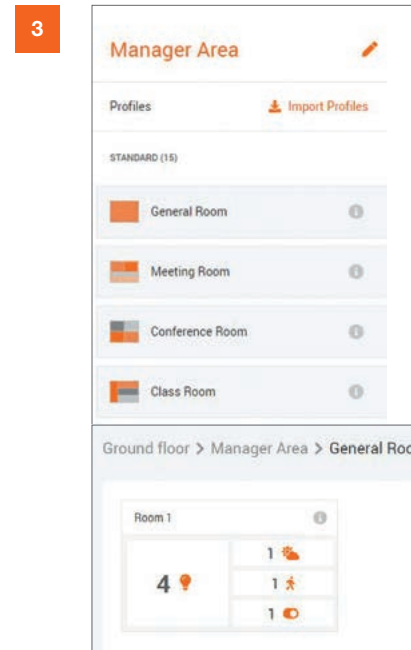— Optional VIVARES Cloud services: create maintenance and energy consumption reports (find out more from page 6)

QUICK AND COMFORTABLE: THE COMMISSIONING TOOL

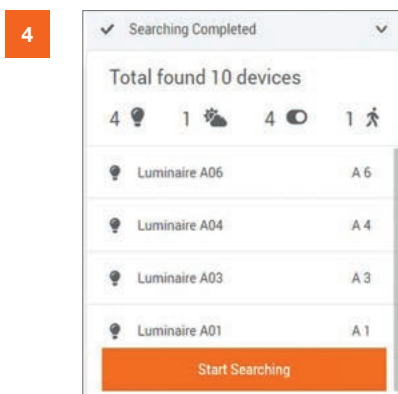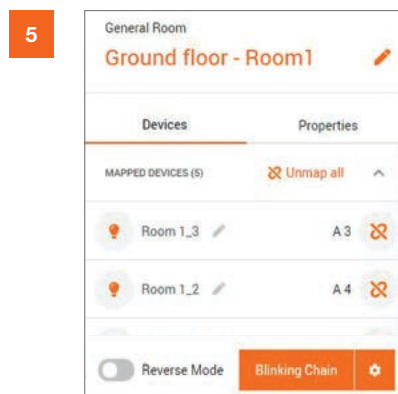**1**

Create an account, register
and log in

2
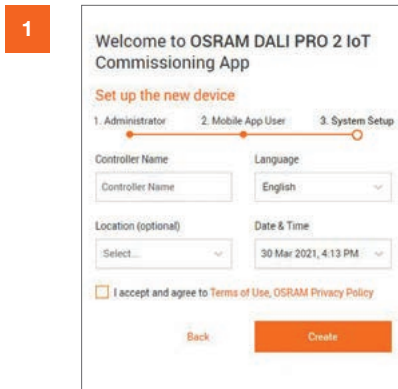
Create new project

3

Drag & drop predefined
templates (rooms, situations)
into the project

4

Automatically assign installed lumi-
naires and components to the relevant
templates via drag & drop

5

Press the sync button,
save in DALI PRO – and that's it!

VIVARES DALI: COMPARISON OF WEBGUI AND PC TOOL FEATURES

Feature	WebGUI	PC tool	Brief description
Initial registration	✔	Only via WebGUI	
Groups/rooms	✔	✔	Option of creating separate rooms and groups
Motion sensors	✔	✔	Control luminaires with motion sensors
Daylight control	✔	✔	Control luminaires with daylight sensors
Dimming	✔	✔	Dim luminaires
Scenes	–	✔	A light scene can be assigned to each individual luminaire in the group
Effects – Tunable White, RGBW	–	✔	Set color effects that change over time
Templates	✔	–	Various predefined applications such as office, meeting room, ...
Schedules	–	✔	Set day and time for various actions such as dimmed light
Human centric lighting – HCL	–	✔	Coming soon: LEDVANCE BIOLUX HCL light profiles (Relax, Create, Natural, Focus, Boost); already available: OSRAM HCL daylight simulation
KNX	–	✔	Option of connecting to KNX systems
Pushbutton coupler – double-click	–	✔	Option of assigning different actions such as dimming the light by double-clicking on the pushbutton coupler
LEDVANCE cloud services	✔	✔	Connection to the optional LEDVANCE cloud service
LAN Interconnect	–	✔	The LAN connection is used to share the DALI coupler input signals between different DALI Pro controllers for the implementation of central functions
Zone limiter	–	✔	For example for sports halls with movable partitions of the playing area
Sequence control	–	✔	Program sequence starting one after the other
Remote access	–	✔	Remote access to the controller to customize settings in the installation
API	–	✔	Read and write status or commands to/from the controller

VIVARES DALI

COMMISSIONING

LMS COMPONENTS

LIGHTING

CASE STUDY

DALI PRO 2 IOT

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

DALI 2   IP 20   LEDVANCE 5 year guarantee [1]

PRODUCT FEATURES

— DALI-2 certified
— IoT ready with built-in gateway for remote data access
— Compatible with PC Tool software and WebGui
— Building Management System integration via optional KNX interface
— Commissioning process via Ethernet/ WLAN
— Small form factor: only 6 TE (DIN rail)

PRODUCT BENEFITS

— BIOLUX Human Centric Lighting for high quality daylight course in office spaces
— Remote access for changes in the installation from every location
— LAN Interconnect to connect up-to 8 Controller into one network
— Cloud API for direct connection of a 3rd party Cloud with the DALI Pro2 IoT Controller
— Automated testing and reporting of emergency lighting installations
— Ready for optional VIVARES Cloud Services

AREAS OF APPLICATION

— Suitable for indoor applications
— Room control, floor control, daylight-dependent control
— Connection of light and/or presence sensors in DALI systems
— LEDVANCE BIOLUX Human Centric Lighting for biological effective light in interior rooms
— RGB and Tunable white applications
— LED Strip lighting

TECHNICAL DATA

Product name	GTIN (EAN)	V_{IN}	Hz	T_a		COLOR	L × W × H [mm] Ø × H [mm]
DALI PRO 2 IOT	4052899**627079**	220…240	50/60	0…+ 40 °C	Din Rail	Light grey	91 × 106 × 62

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

OSRAM

DALI SENSOR LS/PD CI G2

DALI-2 light and presence sensor, ceiling integration

DALI 2   IP 20   LEDVANCE 5 year guarantee [1]

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

FURTHER PRODUCT DETAILS

Detection area of the sensor in meter

h	2.0	2.5	3.0	4.0	5.0
A	2.5	3.3	4.0	5.0	–
B	4.5	5.3	6.0	7.0	7.0

TECHNICAL DATA

Product name	GTIN (EAN)	V$_{IN}$	Hz	☼	◿	Lx	h m	Ta	🔧	COLOR	L × W × H [mm] Ø × H [mm]
DALI SENSOR LS/PD CI G2	4062172072083	16	0	40…90°	6 m	20…800	5	−20…+50 °C	Ceiling integration	White	80 × 55

Products of OSRAM GmbH, distributed by LEDVANCE.

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

OSRAM

VIVARES DALI

COMMISSIONING

LMS COMPONENTS

LIGHTING

CASE STUDY

DALI SENSOR LS/PD LI UF G2

Ultraflat DALI-2 light and presence sensor, luminaire installation

DALI 2   IP 20   LEDVANCE 5 year guarantee [1]

PRODUCT FEATURES

— Light and presence sensor for luminaire installation
— Presence detection via passive IR element
— Light sensor working range: 10…1 000 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
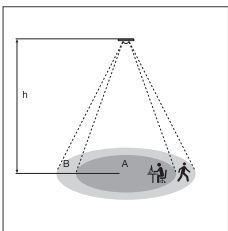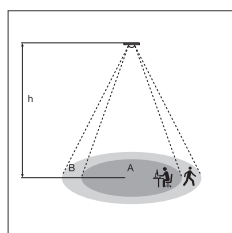
— Suitable for indoor applications
— Installation in office luminaires
— Suitable for floor standing luminaires in combination with an application controller

FURTHER PRODUCT DETAILS

Detection area of the sensor in meter

h	2.0	2.5	3.0	4.0
A	3.0	3.7	4.4	–
B	4.0	5.0	6.0	6.5

TECHNICAL DATA

Product name	GTIN (EAN)	V_{IN}	Hz	〰	◁	Lx	lm/h/m	Ta	🔧	COLOR	L × W × H [mm] Ø × H [mm]
DALI SENSOR LS/PD LI UF G2	4062172**072045**	16	0	90°	6 m	0…1 000	4	−20…+50 °C	Luminaire integration	White	50 × 21 × 16

[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.

OSRAM

DALI SENSOR LS/PD LI G2

DALI-2 light and presence sensor, luminaire installation

DALI 2   **IP 20**   **LEDVANCE 5 year guarantee** [1]

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
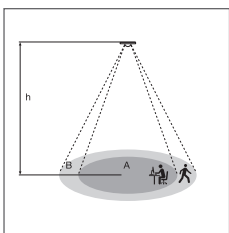
Detection area of the sensor in meter

h		2.0	2.5	3.0	4.0	5.0
A		2.5	3.3	4.0	5.0	–
B		4.5	5.3	6.0	7.0	7.0

TECHNICAL DATA

Product name	GTIN (EAN)	V_IN	Hz	((·))	⌀	Lx	h/m	Ta	🔧	COLOR	L × W × H [mm] Ø × H [mm]
DALI SENSOR LS/PD LI G2	4062172**072069**	16	0	80°	6 m	20…800	5	−20…+50 °C	Ceiling integration/ Luminaire integration	Light grey	48 × 15 × 17

[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.

OSRAM

VIVARES DALI
COMMISSIONING
LMS COMPONENTS
LIGHTING
CASE STUDY

HF LS LI

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

IP 20

LEDVANCE [1]
5 year **guarantee**

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
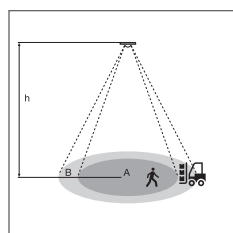— V(λ) corrected light sensor element

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

h	4.0	6.0	8.0	10.0
A	6.7	10.0	13.4	–
B	6.7	10.0	13.4	16.0

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

Product name	GTIN (EAN)	V_IN	Hz	☼	Lx	h m	Ta	🔧	COLOR	L × W × H [mm] Ø × H [mm]
HF LS LI	4052899**921481**	6	0	35…80°	20…800	8	−20…+50 °C	Luminaire attachment/ Luminaire integration	White	56 × 28 × 21

[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.

OSRAM

DALI COUPLER HF G2

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

DALI 2   IP 20   LEDVANCE 5 year guarantee [1]

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

— 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

Product name	GTIN (EAN)	V$_{IN}$	Hz	T$_a$	🔧	COLOR	L × W × H [mm] Ø × H [mm]
DALI COUPLER HF G2	4062172**072199**	220…240	50/60	−20…+50 °C	Ceiling integration/ Luminaire integration	Light grey	118 × 30 × 21

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

OSRAM

LS/PD MULTI 3 CI

Light and presence sensor, recessed ceiling, moveable
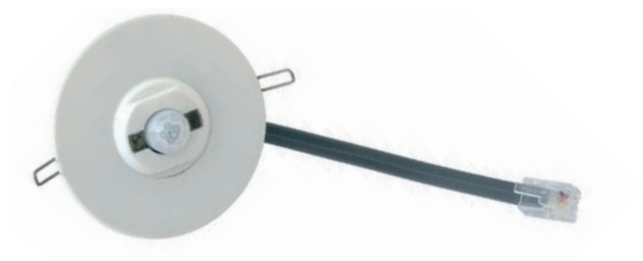
IP 20

LEDVANCE
5 year
guarantee [1]

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
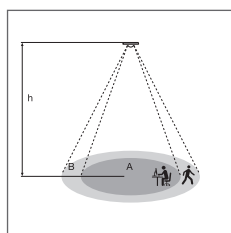
Detection area of the sensor in meter

h	2.0	2.5	3.0	4.0	5.0
A	2.5	3.3	4.0	5.0	–
B	4.5	5.3	6.0	7.0	7.0

FITTING COMPONENTS

DALI COUPLER MULTI3 G2
4062172072113

DALI-2 sensor coupler to integrate MULTI 3 light and presence sensor into DALI installations

TECHNICAL DATA

Product name	GTIN (EAN)			Lx	lh m	Ta		COLOR	L × W × H [mm] Ø × H [mm]
LS/PD MULTI 3 CI	4008321916648	80°	6 m	20…600	4	0…+50 °C	On-top ceiling mounting/ Ceiling integration	White	50 × 25

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

OSRAM

VIVARES DALI

COMMISSIONING

LMS COMPONENTS

LIGHTING

CASE STUDY

DALI COUPLER MULTI3 G2

DALI-2 sensor coupler to integrate MULTI 3 light and presence sensor into DALI installations

DALI 2   **IP 20**   **LEDVANCE** **5** year **guarantee** [1]

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

Product name	GTIN (EAN)	V_{IN}	Hz	T_a	🔧	COLOR	L × W × H [mm] / Ø × H [mm]
DALI COUPLER MULTI3 G2	4062172**072113**	16	0	−20…+50 °C	Ceiling integration/ Luminaire integration	Light grey	118 × 30 × 21

[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.

OSRAM

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

Product name	GTIN (EAN)	V_{IN}	Hz	T_a	🔧	COLOR	L × W × H [mm] Ø × H [mm]
DALI COUPLER E G2	4062172**072212**	220…240	50/60	−20…+50 °C	Ceiling integration/ Luminaire integration	Light grey	118 × 30 × 21

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

OSRAM

DALI COUPLER LS HIGHBAY G2

DALI-2 sensor coupler with integrated light sensor for HIGHBAY sensor

DALI 2   **IP 20**   **LEDVANCE 5 year guarantee** [1]

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
4008321410078

Movement sensor

VISION
4008321957047

Movement sensor

TECHNICAL DATA

Product name	GTIN (EAN)	V_IN	Hz	Lx	h/m	Ta		COLOR	L × W × H [mm] Ø × H [mm]
DALI COUPLER LS HIGHBAY G2	4062172**072137**	16	0	20…800	13	−20…+50 °C	On-top ceiling mounting	White	139 × 118 × 37

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

OSRAM

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Left sidebar: VIVARES DALI · COMMISSIONING · LMS COMPONENTS · LIGHTING · CASE STUDY

HIGH BAY

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

IP 20

LEDVANCE 5 year guarantee [1]

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
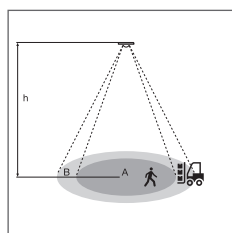
Detection area of the sensor in meter

h	4.0	6.0	8.0	10.0	13.0
A	10.0	12.0	12.0	12.0	–
B	10.0	12.0	12.0	12.0	18.0

FITTING COMPONENTS

DALI COUPLER LS HIGHBAY G2
4062172072137

DALI-2 sensor coupler with integrated light sensor

TECHNICAL DATA

Product name	GTIN (EAN)	V_IN	Hz	(detection)	(beam)	h m	Ta	(mounting)	COLOR	L × W × H [mm] Ø × H [mm]
HIGH BAY	4008321**410078**	120…277	50…60	100°		18 m	13	−10…+70 °C	On-top ceiling mounting	White	116 × 40

[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.

OSRAM

VISION

Motion sensors with switching contact

IP 20

LEDVANCE [1]
5 year **guarantee**

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 %
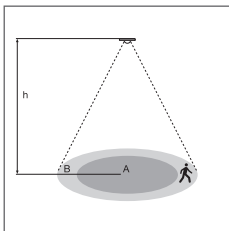 (compared to manual switching)

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

EQUIPMENT / ACCESSORIES
— Suitable for up to 15 electronic control
  gears

FURTHER PRODUCT DETAILS

Detection
area of the
sensor
in meter

h	2.0	2.5	3.0	4.0	4.5
A	–	–	–	–	–
B	12.5	15.5	19.0	21.0	21.0

FITTING COMPONENTS

DALI COUPLER LS HIGHBAY G2
4062172072137

DALI-2 sensor
coupler with
integrated light
sensor

TECHNICAL DATA

Product name	GTIN (EAN)	V_IN	Hz			h/m	Ta		COLOR	L × W × H [mm] Ø × H [mm]
VISION	4008321957047	120…277	50…60	140°	21 m	4.5	−10…+70 °C	On-top ceiling mounting	White	116 × 40

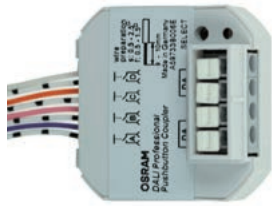[1] Refer to www.ledvance.com/guarantee for precise conditions

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

OSRAM

DALI COUPLER PB G2

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

DALI 2   IP 20   LEDVANCE 5 year guarantee [1]

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

Product name	GTIN (EAN)	V_{IN}	Hz	T_a	🔧	NO. OF OUTPUTS	L × W × H [mm] Ø × H [mm]
DALI COUPLER PB G2	4062172**087575**	16	0	−20…+50 °C	Integrated in flush device box	4	43 × 43 × 21

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

OSRAM

KNX

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

IP 20

5 year guarantee [1]

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

Product name	GTIN (EAN)	T_a	🔧	L × W × H [mm] Ø × H [mm]
KNX IF 250	4062172**020008**	−5…+45 °C	Din Rail	90 × 18 × 62

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

OSRAM

LUMINAIRES

PANEL INDIVILED DALI
– Suitable luminaire for VIVARES and other DALI-2 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

PANEL PERFORMANCE UGR < 19 DALI
– Suitable luminaire for VIVARES and other DALI-2 Light Management Systems
– Energy savings thanks to high system efficacy: up to 120 lm/W
– Tool-free electrical connection due to push button connector
– Through-wiring possible with included connector box

PANEL PERFORMANCE 1200 × 300 UGR < 19 DALI
– Suitable luminaire for VIVARES and other DALI-2 Light Management Systems
– Energy savings thanks to high system efficacy: up to 120 lm/W
– Tool-free electrical connection due to push button connector
– Through-wiring possible with included connector box

Product name	Segmentation	GTIN (EAN)	Replacement for	W	lm	lm/W	K	t[h] [1]	°	UGR	FLICKER VALUE	L × W × H [mm] / Ø × H [mm]	new EAN in 2023
PANEL IndiviLED DALI													
PANEL INDV 600 33 W 3000K DALI	■	4058075**503885**	4 × 18 W/4 × 14 W FL	33.0	3 800	115	3 000	80 000	70	< 16	< 5 %	595 × 595 × 13	
PANEL INDV 600 33 W 4000K DALI	■	4058075**503861**	4 × 18 W/4 × 14 W FL	33.0	4 000	120	4 000	80 000	70	< 16	< 5 %	595 × 595 × 13	
PANEL INDV 625 33 W 4000K DALI	■	4058075**503922**	4 × 18 W/4 × 14 W FL	33.0	4 000	120	4 000	80 000	70	< 16	< 5 %	620 × 620 × 13	
PANEL PERFORMANCE UGR < 19 DALI													
PL PFM 600 DALI 30 W 3000 K UGR19	■	4058075**538085**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	3 000	100 000	90	< 19	< 5 %	595 × 595 × 32	4099854**014703**
PL PFM 600 DALI 30 W 4000 K UGR19	■	4058075**538122**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	4 000	100 000	90	< 19	< 5 %	595 × 595 × 32	4099854**014789**
PL PFM 625 DALI 30 W 3000 K UGR19	■	4058075**538221**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	3 000	100 000	90	< 19	< 5 %	620 × 620 × 32	4099854**014437**
PL PFM 625 DALI 30 W 4000 K UGR19	■	4058075**538252**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	4 000	100 000	90	< 19	< 5 %	620 × 620 × 32	4099854**014482**
PL PFM 600 DALI 36 W 3000 K UGR19	■	4058075**440456**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	3 000	100 000	90	< 19	< 5 %	595 × 595 × 32	4099854**015304**
PL PFM 600 DALI 36 W 4000 K UGR19	■	4058075**440470**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	90	< 19	< 5 %	595 × 595 × 32	4099854**015229**
PL PFM 625 DALI 36 W 3000 K UGR19	■	4058075**440753**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	3 000	100 000	90	< 19	< 5 %	620 × 620 × 32	4099854**014581**
PL PFM 625 DALI 36 W 4000 K UGR19	■	4058075**440777**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	90	< 19	< 5 %	620 × 620 × 32	4099854**014680**
PANEL PERFORMANCE UGR < 19 DALI CRI 90													
PL PFM 600 DALI 36 W 940 UGR19	■	4058075**521988**	4 × 18 W/4 × 14 W FL	36.0	3 750	105	4 000	100 000	90	< 19	< 5 %	595 × 595 × 32	
PANEL PERFORMANCE 1200 × 300 UGR < 19 DALI													
PL PFM 1200x300 DALI 30 W 3000 K UGR19	■	4058075**440210**	2 × 36 W FL	30.0	3 450	115	3 000	100 000	90	< 19	< 5 %	1 195 × 295 × 9	4099854**004124**
PL PFM 1200x300 DALI 30 W 4000 K UGR19	■	4058075**440630**	2 × 36 W FL	30.0	3 600	120	4 000	100 000	90	< 19	< 5 %	1 195 × 295 × 9	4099854**004162**
PANEL PERFORMANCE 1200 × 300 UGR < 19 DALI CRI 90													
PL PFM 1200x300 DALI 30 W 940 UGR19	■	4058075**522022**	2 × 36 W FL	30.0	3 000	100	4 000	100 000	90	< 19	< 5 %	1 195 × 295 × 9	

PANEL ACCESSORIES – QUICK AND EASY TO INSTALL

Whether it's surface mounting, pendant mounting or installation in suspended ceilings, the LEDVANCE panel luminaires can be fitted in many different ways. Clever mounting systems, extensive accessories and complete installation kits make the job extremely easy for you. You can find our accessories at:
ledvance.com/panel-accessories

Further information about the VIVARES products can be found at
ledvance.com/vivaresproducts

■ SUPERIOR CLASS   ■ PERFORMANCE CLASS   ■ VALUE CLASS

[1] t [h]: L70/B50 @ 25 °C (Tₐ)
[2] Refer to www.ledvance.com/guarantee for precise conditions

LUMINAIRES

PANEL PERFORMANCE DALI

– Suitable luminaire for VIVARES and other DALI-2 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

PANEL PERFORMANCE 1 200 × 300 DALI

– Suitable luminaire for VIVARES and other DALI-2 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

Product name	Segmentation	GTIN (EAN)	Replacement for	W	lm	lm/W	K	t[h] [1]	∡°	UGR	FLICKER VALUE	L × W × H [mm] Ø × H [mm]	new EAN in 2023
PANEL PERFORMANCE DALI												CRI >80 / IP20 IP40 / DIM / DALI / 5 YEARS GUARANTEE [2]	
PL PFM 600 DALI 30 W 3000 K	■	4058075**537972**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	3 000	100 000	120	< 22	< 5 %	595 × 595 × 32	4099854**014352**
PL PFM 600 DALI 30 W 4000 K	■	4058075**538030**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	4 000	100 000	120	< 22	< 5 %	595 × 595 × 32	4099854**014505**
PL PFM 625 DALI 30 W 3000 K	■	4058075**538160**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	3 000	100 000	120	< 22	< 5 %	620 × 620 × 32	4099854**014291**
PL PFM 625 DALI 30 W 4000 K	■	4058075**538191**	4 × 18 W/4 × 14 W FL	30.0	3 600	120	4 000	100 000	120	< 22	< 5 %	620 × 620 × 32	4099854**014314**
PL PFM 600 DALI 36 W 3000 K	■	4058075**440357**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	3 000	100 000	120	< 22	< 5 %	595 × 595 × 32	4099854**014925**
PL PFM 600 DALI 36 W 4000 K	■	4058075**440395**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	120	< 22	< 5 %	595 × 595 × 32	4099854**015342**
PL PFM 625 DALI 36 W 3000 K	■	4058075**440616**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	3 000	100 000	120	< 22	< 5 %	620 × 620 × 32	4099854**014338**
PL PFM 625 DALI 36 W 4000 K	■	4058075**440654**	4 × 18 W/4 × 14 W FL	36.0	4 320	120	4 000	100 000	120	< 22	< 5 %	620 × 620 × 32	4099854**014390**
PANEL PERFORMANCE 1200 × 300 DALI												CRI >80 / IP20 IP40 / DIM / DALI / 5 YEARS GUARANTEE [2]	
PL PFM 1200X300 DALI 33W 3000 K	■	4058075**440135**	2 × 36 W FL	33.0	4 000	120	3 000	100 000	120	< 22	< 5 %	1195 × 295 × 9	4099854**004001**
PL PFM 1200X300 DALI 33W 4000 K	■	4058075**440173**	2 × 36 W FL	33.0	4 000	120	4 000	100 000	120	< 22	< 5 %	1195 × 295 × 9	4099854**004049**

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■ SUPERIOR CLASS ■ PERFORMANCE CLASS ■ VALUE CLASS

[1] t [h]: L70/B50 @ 25 °C (T$_a$)
[2] Refer to www.ledvance.com/guarantee for precise conditions

VIVARES DALI

COMMISSIONING

LMS COMPONENTS

LIGHTING

CASE STUDY

LUMINAIRES

PANEL COMFORT UGR < 19 DALI

– Suitable luminaire for VIVARES and other
  DALI-2 Light Management Systems
– High performance with CRI90 and
  up to 118 lm/W
– Highly versatile due to selectable CCT
  (CCT Select – CS)
– High color consistency with SDCM 3
– Good glare reduction (UGR < 19)

Product name	Segmentation	GTIN (EAN)	Replacement for	W	lm	lm/W	K	t[h] [1]	∠°	UGR	FLICKER VALUE	L × W × H [mm] Ø × H [mm]
PANEL COMFORT UGR < 19 DALI												
PL CMFT 600 P 36W 930 940 U19 DALIVR	■	4058075**694507**	4 × 18 W / 4 × 14 W FL	36. 0	4 200	118	4 000	100 000	90	< 19	< 5 %	595 × 595 × 32
PL CMFT 625 P 36W 930 940 U19 DALIVR	■	4058075**694521**	4 × 18 W / 4 × 14 W FL	36. 0	4 200	118	4 000	100 000	90	< 19	< 5 %	620 × 620 × 32

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[1] t [h]: L70/B50 @ 25 °C (T$_a$)
[2] Refer to www.ledvance.com/guarantee for precise conditions

LUMINAIRES

PANEL DIRECT/INDIRECT 1 200 UGR < 19 DALI
– Suitable luminaire for VIVARES and other DALI-2 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)

LINEAR INDIVILED DIRECT DALI
– Suitable luminaire for VIVARES and other DALI-2 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

DOWNLIGHT UGR19 DALI
– Suitable luminaire for VIVARES and other DALI-2 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

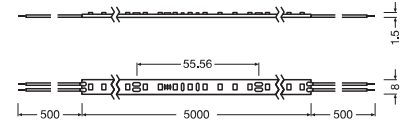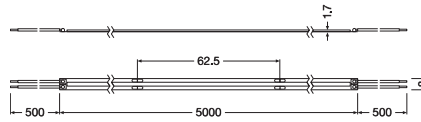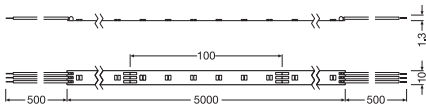| Product name	Segmentation	GTIN (EAN)	Replacement for	W	lm	lm/W	K	t[h] [1]	°	UGR	FLICKER VALUE	⌀	L × W × H [mm] Ø × H [mm]
PANEL DIRECT/INDIRECT 1 200 UGR < 19 DALI													
PANEL D/I 1200 36 W 3000 K UGR 19 DALI	■	4058075**504028**	2 × 58 W FL	36.0	3 800	105	3 000	80 000	110	< 19	< 5 %	–	1 200 × 300 × 16
PANEL D/I 1200 36 W 4000 K UGR19 DALI	■	4058075**504042**	2 × 58 W FL	36.0	4 000	110	4 000	80 000	110	< 19	< 5 %	–	1 200 × 300 × 16
LINEAR IndiviLED DIRECT DALI													
LN INDV D 1200 34 W 3000 K DALI	■	4058075**503946**	2 × 28 W FL	34.0	3 800	110	3 000	60 000	70	< 16	< 5 %	–	1 199 × 120 × 40
LN INDV D 1200 34 W 4000 K DALI	■	4058075**503960**	2 × 28 W FL	34.0	4 200	125	4 000	60 000	70	< 16	< 5 %	–	1 199 × 120 × 40
LN INDV D 1500 48 W 3000 K DALI	■	4058075**503984**	2 × 49 W FL	48.0	5 300	110	3 000	60 000	70	< 16	< 5 %	–	1 488 × 120 × 40
LN INDV D 1500 48 W 4000 K DALI	■	4058075**504004**	2 × 49 W FL	48.0	5 700	120	4 000	60 000	70	< 16	< 5 %	–	1 488 × 120 × 40
DOWNLIGHT UGR19 DALI													
DL UGR19 PFM DN155 14 W 830 WT IP54 DALI	■	4058075**459298**	1 × 26 W CFLi	14.0	1 500	105	3 000	70 000	65	< 19	< 10 %	155	180 × 65
DL UGR19 PFM DN155 14 W 840 WT IP54 DALI	■	4058075**459311**	1 × 26 W CFLi	14.0	1 600	115	4 000	70 000	65	< 19	< 10 %	155	180 × 65
DL UGR19 PFM DN195 21 W 830 WT IP54 DALI	■	4058075**459830**	2 × 26 W CFLi	21.0	2 400	115	3 000	70 000	65	< 19	< 10 %	195	220 × 82
DL UGR19 PFM DN195 21 W 840 WT IP54 DALI	■	4058075**459854**	2 × 26 W CFLi	21.0	2 520	120	4 000	70 000	65	< 19	< 10 %	195	220 × 82

Further information about the VIVARES products can be found at
ledvance.com/vivaresproducts

■ SUPERIOR CLASS   ■ PERFORMANCE CLASS   ■ VALUE CLASS

[1] t [h]: L70/B50 @ 25 °C (T$_a$)
[2] Refer to www.ledvance.com/guarantee for precise conditions

LED STRIPS

LED STRIP SUPERIOR-2000 TW
– Great design freedom thanks to long, flexible TW LED Strips
– Easy installation and tool-free connection
– Simple installation thanks to adhesive tape
– Maximum flexibility thanks to a wide range of accessories
– Simple connection thanks to integrated cables on both sides

LED STRIP PERFORMANCE COB-1000
– Excellent homogenous light, without visible light points thanks to COB technology
– Great design freedom thanks to the flexibility and cuttability of the module
– Easy mounting on many smooth surfaces with self-adhesive tape on the back
– Simple connection thanks to integrated cables on both sides

LED STRIP PERFORMANCE CLASS
– Great scope of design options due to long and flexible LED strips
– Easy installation, no tools required for connection
– Easy mounting on many smooth surfaces thanks to self-adhesive tape
– Maximum flexibility due to large range of accessories
– Simple connection thanks to integrated cables on both sides

Product name	Segmentation	GTIN (EAN)	K	lm METER	lm	W METER	W	lm/W	⊚ METER	PITCH [mm]	Ta	L × W × H [mm]	I min [mm]
LED STRIP SUPERIOR-2000 TW													
LS SUP-2000/TW/927-965/5	■	4058075436084	2 700…6 500	1 700	9 140	21.6[5]	108.0	79.0	120	16.67	−20…+55 °C	5 000 × 10.0 × 1.2	100.0
LED STRIP PERFORMANCE COB-1000													
LS PFM-1000/COB/927/5	■	4058075597525	2 700	1 010[4]	2 850	11.0[4]	38.0	92.0[4]	384	−	−20…+55 °C	5 000 × 8.0 × 1.7	62.5
LS PFM-1000/COB/930/5	■	4058075597532	3 000	1 010[4]	3 100	11.0[4]	38.0	95.0[4]	384	−	−20…+55 °C	5 000 × 8.0 × 1.7	62.5
LS PFM-1000/COB/940/5	■	4058075597549	4 000	1 040[4]	3 300	11.0[4]	38.0	97.0[4]	384	−	−20…+55 °C	5 000 × 8.0 × 1.7	62.5
LS PFM-1000/COB/965/5	■	4058075597556	6 500	1 060[4]	3 500	11.0[4]	38.0	98.0[4]	384	−	−20…+55 °C	5 000 × 8.0 × 1.7	62.5
LED STRIP PERFORMANCE CLASS													
LS P-500/927/5	■	4058075707474	2 700	505	2 265	4.2	21.0	120.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-500/930/5	■	4058075707498	3 000	515	2 310	4.2	21.0	122.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-500/940/5	■	4058075707511	4 000	545	2 455	4.2	21.0	130.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-500/965/5	■	4058075707535	6 500	545	2 455	4.2	21.0	130.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1000/927/5	■	4058075707559	2 700	1 010	4 645	8.6	43.0	118.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1000/930/5	■	4058075707573	3 000	1 030	4 730	8.6	43.0	120.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1000/940/5	■	4058075707597	4 000	1 090	5 030	8.6	43.0	127.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1000/965/5	■	4058075707610	6 500	1 090	5 030	8.6	43.0	127.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1500/927/5	■	4058075707634	2 700	1 435	6 480	12.0	60.0	119.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1500/930/5	■	4058075707658	3 000	1 455	6 600	12.0	60.0	121.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1500/940/5	■	4058075707672	4 000	1 550	7 020	12.0	60.0	129.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-1500/965/5	■	4058075707696	6 500	1 550	7 020	12.0	60.0	129.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-2000/927/5	■	4058075707719	2 700	1 840	8 420	15.6	78.0	118.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-2000/930/5	■	4058075707733	3 000	1 870	8 580	15.6	78.0	120.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-2000/940/5	■	4058075707757	4 000	1 980	9 125	15.6	78.0	127.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56
LS P-2000/965/5	■	4058075707771	6 500	1 980	9 125	15.6	78.0	127.0	144	6.94	−20…+55 °C	5 000 × 8.0 × 1.5	55.56

■ SUPERIOR CLASS   ■ PERFORMANCE CLASS   ■ VALUE CLASS

Further information about the VIVARES products can be found at
ledvance.com/vivaresproducts
ledvance.com/ledstripproducts

[1] LED Strip TW: L70/B50 at T_c max. 85 °C / LED Strip COB: L70/B50 at T_c max. 65 °C / LED Strip PFM: L70/B50 at T_a 55 °C
[2] Dimmable with suitable drivers, see also www.ledvance.com/dim
[3] Refer to www.ledvance.com/guarantee for precise conditions
[4] Value based on first meter of the product
[5] 10.8 W for 2 700 K, 10.8 W for 6 500 K

FUTURE OFFICE
STATE-OF-THE-ART LIGHTING IN THE BUSINESS CAMPUS HUB GARCHING

LEDVANCE implemented a lighting concept for the Business Campus HUB in Garching, putting in place an office of the future that brings together energy efficiency and high levels of user comfort and creates a feel-good atmosphere.

The lighting system in the Business Campus HUB in Garching is in a class of its own.

THE CHALLENGE

Modern offices are more than functional workplaces. They are supposed to positively influence employee motivation, well-being and productivity, promote team spirit and, as a collaborative, social place, make the employer more attractive. With this in mind, Business Campus Management GmbH in Garching, together with selected partners, wanted to set up the leasable Business Campus HUB as a future office in an area of around 500 m². The aim was for the project to create added value for both companies and employees and therefore make renting the office space particularly attractive. To do that, a lighting concept was needed that meets all the requirements of innovative office lighting.

VIVARES DALI

COMMISSIONING

LMS COMPONENTS

LIGHTING

CASE STUDY

THE SOLUTION

As an expert for complex lighting projects, LEDVANCE was the first point of contact for Business Campus Management GmbH to jointly implement a future-oriented, smart lighting concept. In addition to improved energy efficiency and reduced mainte-nance, the main focus was on making the workplaces more attractive and adding value for employees with a special feel-good atmosphere. Using the VIVARES light management system as a wireless Zigbee and a wired DALI version as well as the BIOLUX HCL system played an important role. But LEDVANCE also set new standards in design. In the Business Campus HUB, decorative luminaires – custom-made for the lounge area – and indirect accent lighting complement the functional light sources.

Lounge area with customized LED strip pendants and decorative VINTAGE 1906 PenduLum luminaires.

> "With LEDVANCE, we have the perfect lighting partner right here in the Business Campus HUB. We were very impressed by LEDVANCE's professional planning and implementation of the lighting solutions and look forward to other joint projects."
>
> **Lars Dücker,**
> Managing Director of Business Campus Management GmbH

THE BENEFITS

As a lighting specialist with over 100 years of experience and an expert in technology trends, LEDVANCE has the comprehensive portfolio of innovative products and the relevant know-how to professionally implement a lighting project such as the Business Campus HUB in Garching. So, Business Campus Management GmbH could not only rely on the quality and compatibility of lamps, luminaires, sensors, light management systems and many other components but also on advice, planning and support from the initial meeting right through to ongoing office operations.

SUMMARY

Together with selected partners, Business Campus Manage-ment GmbH in Garching set up the leasable Business Campus HUB as a future office in an area of around 500 m². Based on state-of-the-art lighting technologies, LEDVANCE designed and implemented lighting solutions that are precisely tailored to the different areas. To create excellent working conditions and a feel-good atmosphere, the office of the future uses functional luminaires featuring future-oriented technology as well as smart and decorative luminaires, indirect accent lighting and custom-made luminaires designed for the lounge area. That's how the innovative lighting concept plays a huge role in turning a pure workplace into a motivating and inspiring place, adding value for companies and employees.

OUR FRIENDLY SUPPORT FOR YOU
SERVICES FOR YOUR WHOLE PROJECT

PROFESSIONAL PLANNING

DIALUX AND RELUX

LEDVANCE is collaborating with the developers of DIALux and Relux software. So you can now easily integrate LEDVANCE products in your lighting plans. Do you or your clients use the BIM method? Our luminaire data is BIM-compatible!

COMPLETE SUPPORT FROM A SINGLE SOURCE

Take advantage of our professional, tailor-made advice for successful and smooth planning of your lighting project. We take care of the entire process and offer you customized solutions for all your lighting require-ments – all from a single source.

YOUR BENEFITS AT A GLANCE

LEDVANCE carries out the complete calculation for your lighting project:

— Optimal light distribution
— Precise wattage per sqm
— Most efficient calculation of the number of luminaires and VIVARES components required

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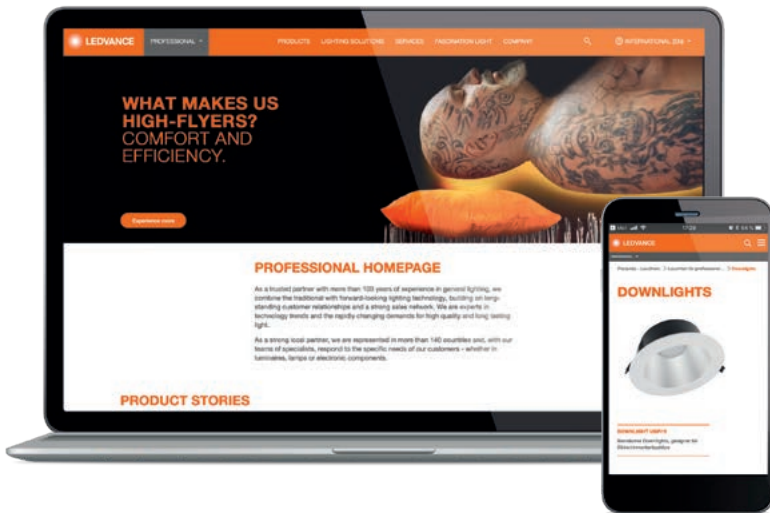
▶ **PERFECTLY FILTERED**
Use the online filters to find precisely what you're looking for in our luminaire and LMS portfolio – type of mounting, IP rating, light color, etc.: ledvance.com/luminaires and ledvance.com/light-management-systems

▶ **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:**

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**

VIVARES YOUTUBE CHANNEL

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

VIVARES Zigbee:
ledvance.com/zigbeevideos

VIVARES DALI:
ledvance.com/dalivideos

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 if you're looking for energy-efficient and future-proof lighting. Whether you need luminaires, lamps, HCL systems, electronic components, light management systems or smart residential products, LEDVANCE is your expert partner for complex lighting projects. You can always rely on LEDVANCE for excellent brand quality, professional service and a good price/performance ratio.

FUNCTIONAL AESTHETIC 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, the 2020 Red Dot Award for Product Design and the 2020 German Innovation Award.

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 comprises 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
Go to ledvance.com for more information on LEDVANCE's extensive product portfolio, clever apps and tools that will help you in your day-to-day work.
www.ledvance.com

SHEDDING LIGHT, SYMBOLS AND ABBREVIATIONS

	Energy efficiency class	**Ta**	Ambient temperature range		On/Off Function
IP	Type of protection	**V**IN	Nominal input voltage	**€**	Recommended retail price
IP 20 IP 40	Type of protection, back / front		Detection area	SCALE DESIGN	Scale design
CRI	Color rendering index		Type of installation		Protection class I
DIM	Dimmable	**UGR**	Unified Glare Rating		Protection class II
lm	Luminous flux in lm	**FLICKER VALUE**	Flicker Value	DALI 2	DALI-2 technology
W	Power in W	**Lx**	Operating range, light sensor	zigbee	Zigbee 3.0 technology
K	Color temperature in K	**h m**	Maximum installation height		Base
lm/W	Luminous efficacy	**t[h]**	Average period of use/life	**l [mm]**	Length in mm
LEDVANCE 5 JAHRE GARANTIE	Guarantee	WARM COOL	Tunable White	Ø d [mm]	Diameter in mm
	Detection angle		Beam angle in °		
	Ceiling opening	**lm METER**	Luminous flux per meter		
REPLACE-MENT FOR	Replacement wattage and type	**W METER**	Nominal wattage per meter in W		
COLOR	Product color	**SHORT PITCH**	Short pitch		
A MAX	Maximum switchable current	**24 V DC**	Constant voltage		
I IN	Nominal input currant	**METER**	Number of LEDs per meter		
No. of OUTPUTS	Number of controllable devices	**PITCH [mm]**	LED pitch in mm		
Hz	Mains frequency	**l min. [mm]**	Length smallest unit		

LIST OF ABBREVIATIONS

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

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.

LEDVANCE

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V | voltimum
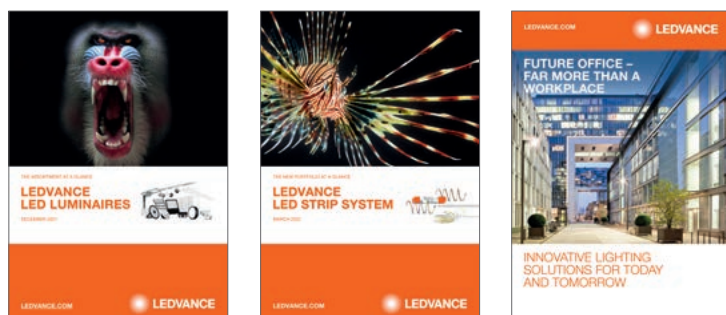
For more information about lighting solutions go to
www.ledvance.com/download

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OSRAM