



Light is networked

HubSense®: A new experience of commissioning radio-based lighting control

Scalable office retrofit solutions with intuitive commissioning. **Light is OSRAM**

Technology Partner
SILVAIR

OSRAM

Intelligent lighting infrastructure for existing buildings

Transform existing lighting installations into a flexible, efficient and wireless communication system that is easily scalable. With this retrofit solution, you can bring individual offices, corridors, conference rooms or open-plan offices, for example, up to the latest state of digitalization when renovating old systems. Quickly, cost-efficiently and easily.

HubSense® continuously saves you money

This system allows you to work more cost-efficiently in every project phase – from planning and installation to handover and use.

1 Project engineering

In this phase, you can use existing cabling and assign the zones independently of the cabling. In addition, changes can also be made shortly before installation.

2 Installation

During installation, there is no need to lay new cabling. This allows you to considerably reduce not only costs but also the time during which the building space cannot be used. When luminaires are commissioned on site, the HubSense® Commissioning Tool offers several ways to significantly reduce the time required for commissioning, including simple luminaire localization using range filters

and predefined lighting control profiles. In addition, multiple installers can perform commissioning simultaneously.

With the option to test the network quality after installation, you reduce the risk of needing subsequent corrections after the handover.

3 Operation

During operation, the various lighting control options (presence and daylight control) can be used to reduce energy consumption and operating costs, while at the same time creating a comfortable lighting environment. This can be adapted to new room utilization concepts at any time without having to make changes to the cabling. This reduces the costs for such adaptations to a minimum, making HubSense® a solid, sustainable investment.

Energy saving example for an office area of 500m² (67 luminaires 4 x T5, 12 hours operating time and 250 days of use)

| Installation type | Energy consumption per year ¹⁾ | Savings ¹⁾ |
|---|---|-----------------------|
| Existing system, modern fluorescent lamps 4 x T5 (14 W) | 11,848 kWh | |
| New system, LED luminaires (120 lm/W) | 6,834 kWh | 42 % |
| New system with daylight and presence control | 3,895 kWh | 67 % |

¹⁾ The figures are only indicative and may vary from project to project.



HubSense® benefits at a glance



Intuitive planning and commissioning

Even comprehensive projects can be realized without special knowledge.

- Creation and pre-commissioning of the project in advance via web app (optional)
- Simultaneous on-site commissioning by several installers possible
- Predefined lighting control profiles for office applications
- Easy luminaire localization and zone assignment via mobile app



Fast and flexible installation

Compared to wire-based DALI systems, planning and replacement of existing lighting installations are made much easier.

- Suitable for existing infrastructures regardless of architectural conditions
- System quickly adaptable to new space usage and conditions
- No gateway required



Sustainable investment

Lighting control based on the open qualified Bluetooth mesh radio standard.

- Protection through three-level safety concept
- Scalability from individual rooms to complete buildings²⁾
- Network interoperability verified by an independent organization
- One tool for small and large projects

2) Up to 1,000 network nodes recommended



Profitable retrofitting

By modernizing lighting systems with efficient lighting control, you can prove your expertise.

- Better payback time than purely switchable lighting solutions
- Higher energy saving potential due to daylight control and presence detection
- Flexible adaptation of lighting control to different project requirements
- Reduced downtime during retrofitting
- Step-by-step modernization of the building possible

Easy realization of HubSense® projects

Benefit from easy commissioning, made possible by well-thought-out configuration options: with practical profiles, logical operation, intelligent linking of lighting groups and the option of storing a building plan.

Procedure for planning and commissioning

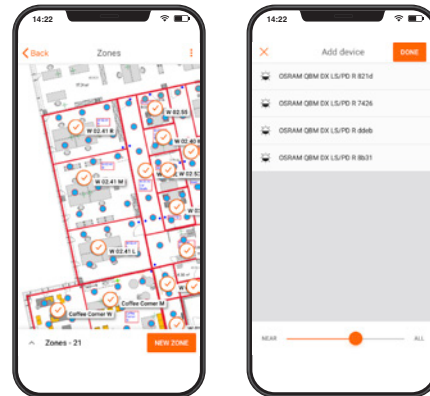
1 Creating a project plan (optional)

Using the web app ¹⁾, you can create a floor plan for the project on your PC or tablet – from a single room to an open-plan office. Predefined lighting control profiles, which can also be modified, can be assigned to individual zones. This work can be done in advance, which reduces the time required on site.



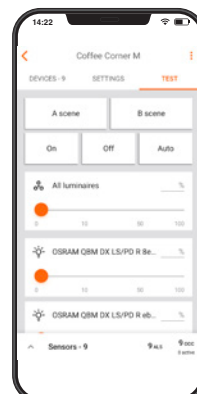
2 Commissioning luminaires on site

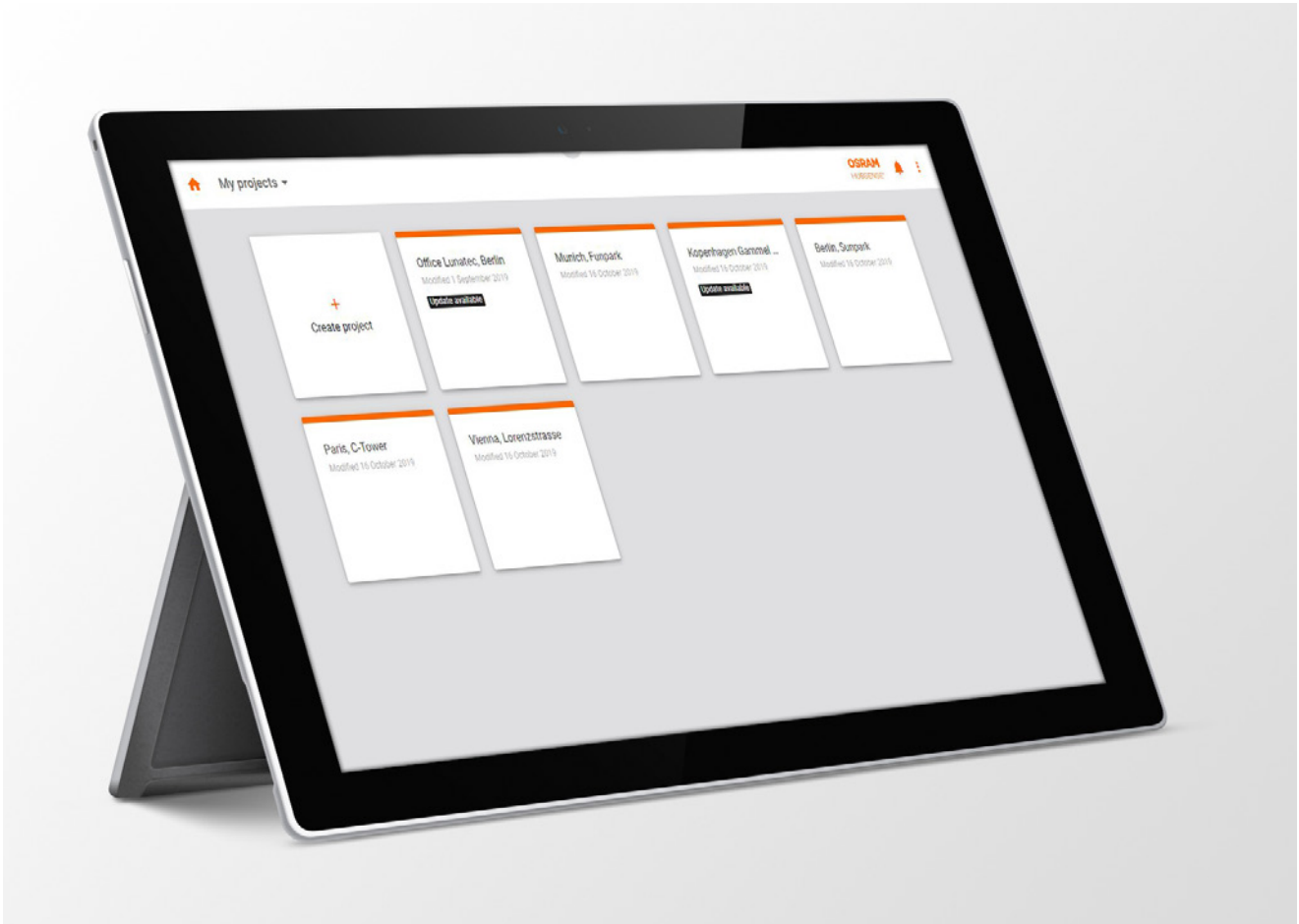
After the HubSense® luminaires have been installed, the mobile app ²⁾ is used for locating the luminaires via the RSSI filter and assigning them to the zones. The assignment of luminaires can be carried out by several installers at the same time. Of course, projects can also be set up directly with the mobile app without creating them in the web app first.



3 Reconfiguring and testing the system

If you want to change settings at the end of the installation, you can use the web and mobile app to adjust the parameters of the individual zones as required, e.g. daylight control, dimming levels or delay periods. A new zone assignment is also possible. In addition, the network quality in the zone and in the entire installation can be checked.





Features of the HubSense® Commissioning Tools

Pre-defined profiles

for office applications for fast commissioning and reduction of overall project costs

Intuitive user interface

via touch screen

Optimized commissioning concept

reduces required time on site

Wide range of lighting control profiles

from manual switching to presence and absence control to daylight control

Intelligent linking of lighting groups

between zones (e.g. corridors)

Integrated user administration

for the respective project

Network quality test

possible after commissioning

1) The app requires an internet connection and Google Chrome version 70 or higher.

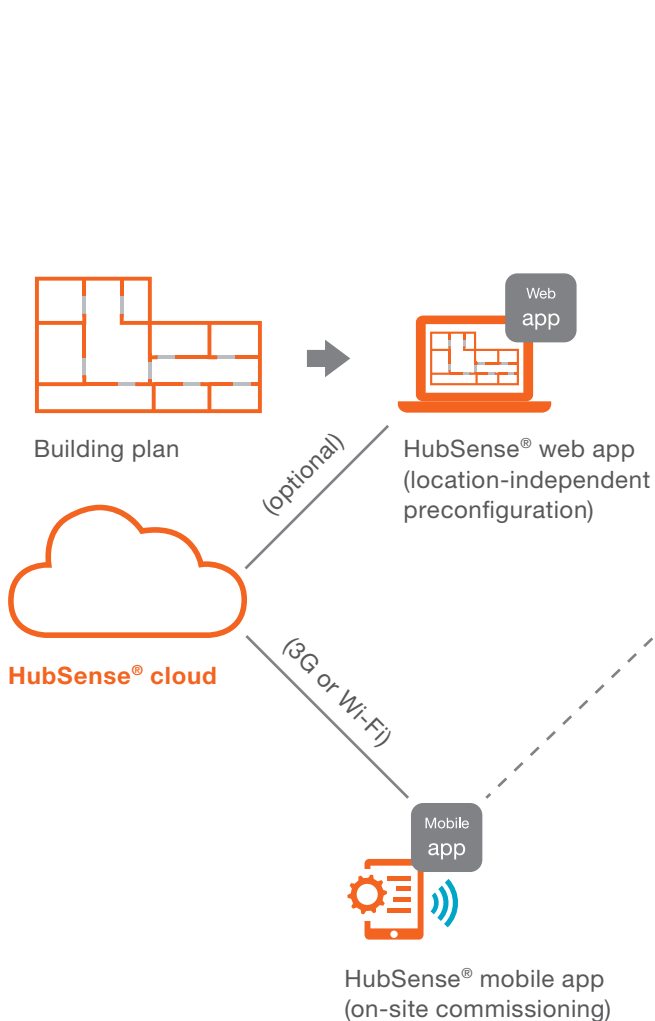
2) The HubSense® Commissioning app requires an iOS device running iOS 12+ and both an enabled Bluetooth feature and an internet connection either mobile (at least 3G) or Wi-Fi.

HubSense® system components

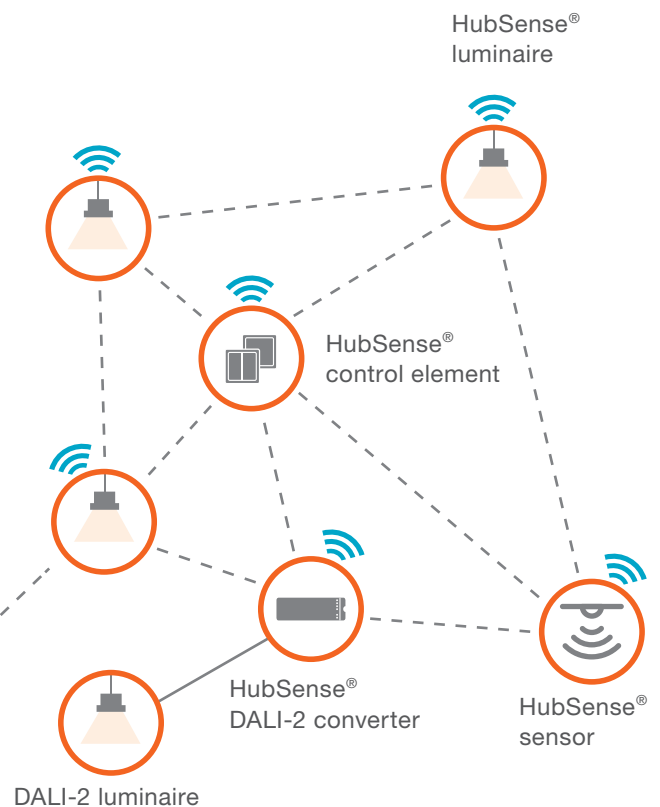
The HubSense® Commissioning Tool mobile app enables you to commission sensors, control elements and luminaires with OSRAM QBM components based on the qualified Bluetooth mesh radio standard.

The system also supports battery-free wireless switches. The QBM Bluetooth-to-DALI-2 converter DALI CONV LI can connect both DALI-2 luminaires and DALI-2 sensors to the wireless network, using the advantages of radio technology. This allows an easy transition from wired lighting control to the radio-based world.

HubSense® Commissioning



HubSense® – qualified Bluetooth mesh



HubSense® web and mobile app



Web
app



HubSense® web app
(browser: Google Chrome)



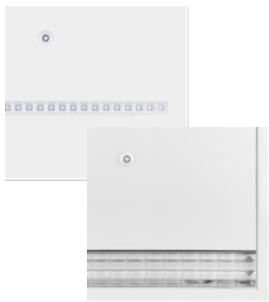
Mobile
app



HubSense® Commissioning
Tool mobile app



HubSense® components



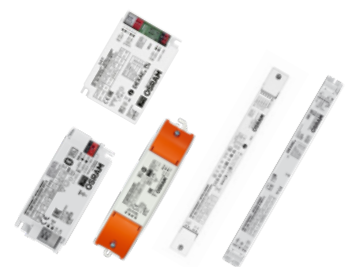
HubSense® component
integrated in luminaire
(example)



Entry device/Sensor



Control device/Sensor



LED driver

Detailed information on the products can be found at www.osram.com/hubsense.

You want to contact us?
Here you can find our worldwide sales contacts

https://www.osram.com/ds/contact_2.jsp



Need more support? As a registered customer,
you can contact our experts by e-mail

support-ds@osram.com



Not a registered customer?
Please use our contact form

<https://www.osram.com/apps/cbcontact/contacts/add>



Disclaimer:

Luminaires with OSRAM HubSense® components (OSRAM QBM) can be commissioned with the OSRAM HubSense® Commissioning Tool (<https://platform.hubsense.eu>). For this purpose, the terms of use and the privacy policy must be accepted in advance.

OSRAM GmbH

Headquarters Germany:

Marcel-Breuer-Strasse 6
80807 Munich, Germany
Phone +49 89 6213-0
Fax +49 89 6213-2020
www.osram.com

OSRAM