Casambi Design Guide

Highlights



Industrial spaces are one of the more complex building types to illuminate. Industrial facilities, particularly industrial warehouses and storage areas have one of the highest energy consumption for lighting (46kWh/sqm per year), therefore reducing operational and maintenance costs while increasing energy savings is very important. Workshops or production halls are areas that, in many cases, may operate 24/7, so energy efficient luminaires and more efficient use of daylight are beneficial not only for energy savings, but also for improved visual conditions, and the general wellbeing of employees.

Casambi offers a wireless communication solution that caters well to today's industrial facilities – by directly answering their need for powerful lighting control while tapping into further energy savings with sensors, switches, and other devices from the Casambi ecosystem. With the Casambi app, adjustable lighting such as daylighting can be implemented independently, conforming to localized needs and enabling energy saving through optimized use of light throughout the space. Based on Bluetooth Low Energy – the most popular and reliable low-power radio technology found in all modern smartphones, tablets, and smartwatches today – changes can be made at the touch of a button.

Casambi provides the best solution for renovation and extensions. As no control wires are needed, the installation is quick and non-disruptive. The versatility of the Casambi system makes it possible to extend the lifetime of existing installations by adding the layer of smart controls in a seamless way.

This guide outlines the transformative power of Casambi's wireless lighting control solution when applied within industrial spaces. It has been written with a view to demonstrating just how easy and joyful it can be to specify lighting solutions for industrial environments.

Facility Management Advantages

- Energy efficiency and sustainability
- Data and connectivity, occupancy control
- No internet connection required for daily operation
- Reduced operational costs
- Wireless emergency lighting with automated testing & reporting
- Non-disruptive installation, easy commissioning

Occupant Advantages

- Non-disruptive installation, easy commissioning
- Scalability

Specifier Advantages

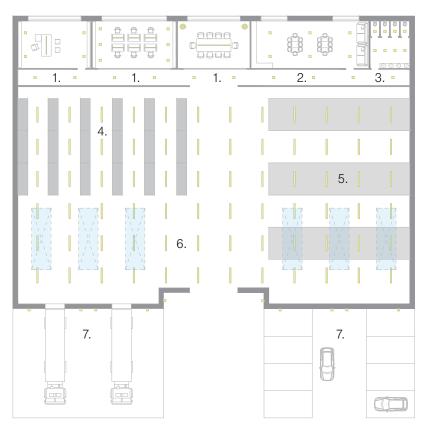
- The range and robustness of the mesh
- Advantages for future-proofing the installation
- Task-related predefined lighting scenes
- Flexibility
- Scalability
- Intuitive UI

Installer/Contractor Advantages

- Future-proof the installation
- Free software updates over the air



Floor Plan



Possible Functionalities

1. Offices and Meeting Room



2. Lounge Area & 3. Bathrooms



4. Aisles/ Storage



5. Loading Hall & 6. Assembly



7. Exterior/ Parking



- **Switch**: ON/OFF switch or dimming controller.
- **Xpress**: Casambi wall-mounted switch to control up to 4 scenes, dimming and color temperature.
- **Casambi App**: Full functionality for commissioning and end-user control.
- **Daylight**: Level of artificial lighting is adjusted in response to available daylight.
- Occupancy detection: Lights are activated or dimmed based on presence.

Controllers



Planning a project with Casambi is as simple as deciding on the functionality of the required control and then combining it with devices from the Casambi ecosystem.

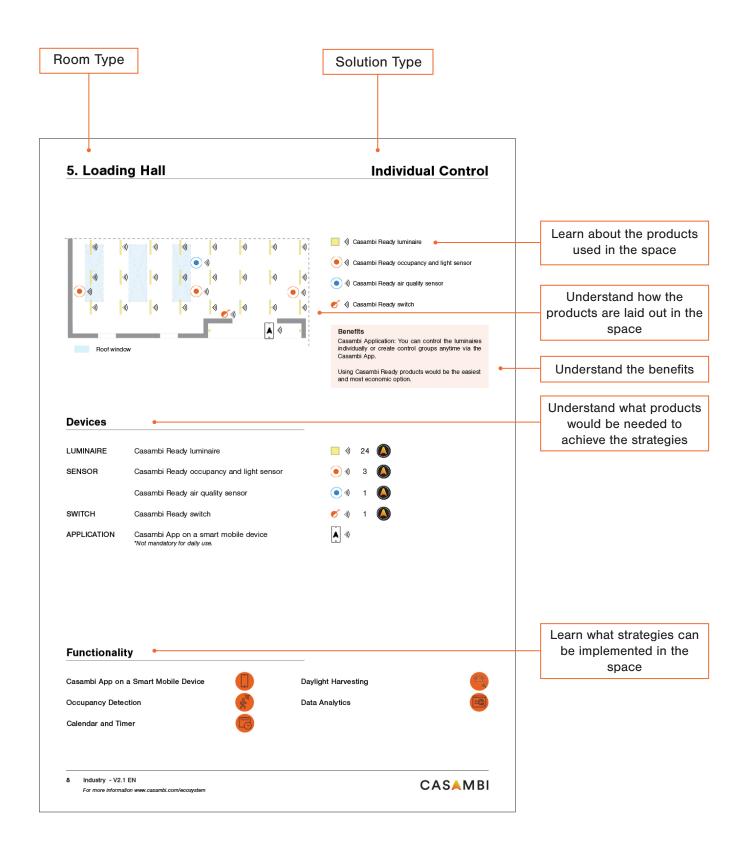
Each device from the Casambi ecosystem is 100% interoperable with all Casambi enabled devices from other manufacturers.

The free Casambi app works as the user interface, commissioning tool, and remote gateway, so no additional devices or software is required to operate a standard Casambi mesh network.

Wireless and self-powered switches from the Casambi ecosystem can be used as a handheld device or easily attached to any surface. They work both as an on/off switch and a dimming controller.

- **Calendar & Timer**: Activate or deactivate light scenes based on the time of day or specific dates.
- **Scenes**: Programmed scenes or animations adjusting the light level, color or color temperature.
- **Circadian Lighting**: Personalized circadian profiles to adjust the color temperature (K) of luminaires based on the time of day.

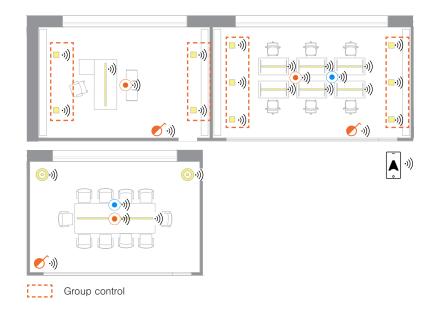






1. Offices and Meeting Room

Group Control



•)) Casambi Ready luminaire
•)) Casambi Ready occupancy and light sensor
•)) Casambi Ready air quality sensor
•)) Casambi Ready switch

Benefits

Casambi Application: You can create separate control groups or create new control groups anytime via the Casambi App.

Devices

| LUMINAIRE | Casambi Ready Iuminaire | •)) | 20 | |
|-------------|--|----------------|----|--|
| SENSOR | Casambi Ready occupancy and light sensor | •••)) | 3 | |
| | Casambi Ready air quality sensor | •••)) | 2 | |
| SWITCH | Casambi Ready switch | (, .)) | 3 | |
| APPLICATION | Casambi App on a smart mobile device *Not mandatory for daily use. | ,))) | | |

Functionality

Casambi App on a Smart Mobile Device

Occupancy Detection

Calendar and Timer

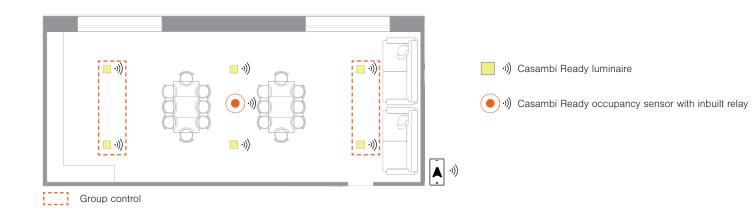


Human Centric Lighting

Daylight Harvesting







Devices

| LUMINAIRE | Casambi Ready Iuminaire | -))) | 6 | |
|-------------|--|--------|---|--|
| SENSOR | Casambi Ready occupancy sensor with inbuilt relay | ••••)) | 1 | |
| APPLICATION | Casambi App on a smart mobile device *Not mandatory for daily use. | ▲ ->)) | | |

Functionality

Casambi App on a Smart Mobile Device

Occupancy Detection

Daylight Harvesting



Calendar and Timer

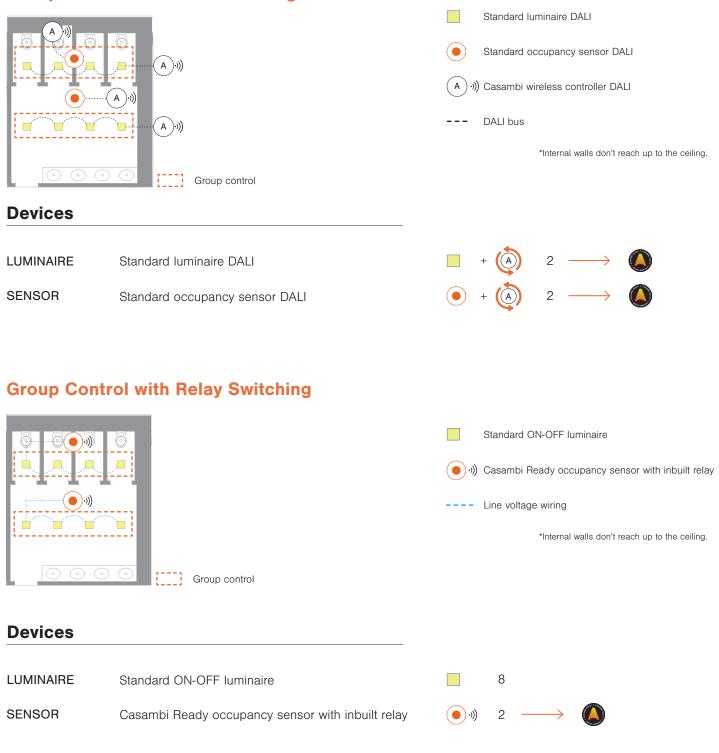


Data Analytics

5 Industry - V2.1 EN For more information www.casambi.com/ecosystem



Group Control with DALI Dimming



Functionality

Occupancy Detection

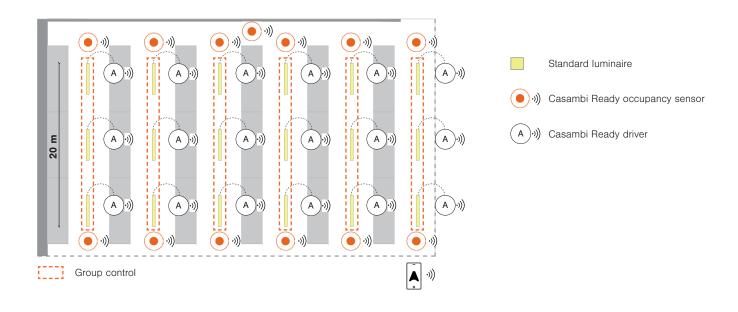
Calendar and Timer





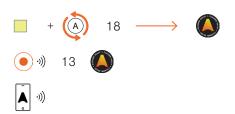
4. Aisles/ Storage

Retrofit



Devices

| LUMINAIRE | Standard luminaire |
|-------------|---|
| SENSOR | Casambi Ready occupancy sensor |
| APPLICATION | Casambi App on a smart mobile device *Not mandatory for daily use. |



Functionality

Casambi App on a Smart Mobile Device

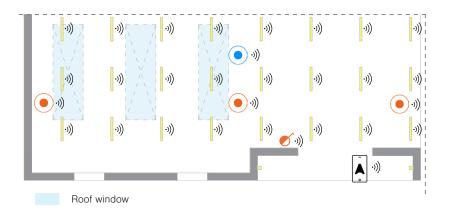




Calendar and Timer







•)) Casambi Ready luminaire

(●)·)) Casambi Ready occupancy and light sensor

)) Casambi Ready air quality sensor

🍼 🔊 Casambi Ready switch

Benefits

Casambi Application: You can control the luminaires individually or create control groups anytime via the Casambi App.

Using Casambi Ready products would be the easiest and most economic option.

Devices

| LUMINAIRE | Casambi Ready Iuminaire | -))) | 24 | |
|-------------|--|-------------|----|--|
| SENSOR | Casambi Ready occupancy and light sensor | •••• | 3 | |
| | Casambi Ready air quality sensor | •••)) | 1 | |
| SWITCH | Casambi Ready switch | ()) | 1 | |
| APPLICATION | Casambi App on a smart mobile device *Not mandatory for daily use. | •))) ° | | |

Functionality

Casambi App on a Smart Mobile Device

Occupancy Detection

Calendar and Timer

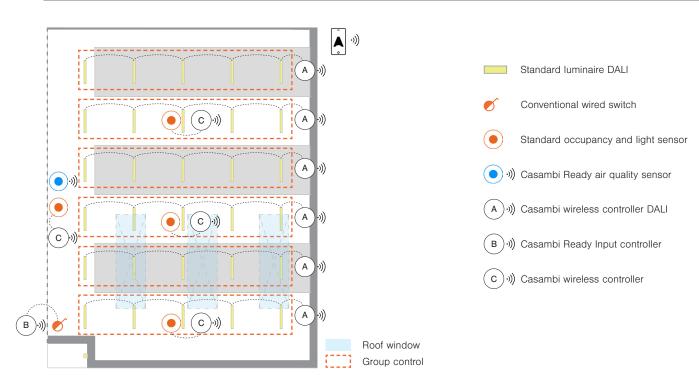


Daylight Harvesting





6. Assembly



Devices

| LUMINAIRE | Standard luminaire | □ + (À) 6 → (○) |
|-------------|---|---|
| SWITCH | Conventional wired switch | \checkmark + (\textcircled{B}) 1 \longrightarrow (\textcircled{A}) |
| SENSOR | Standard occupancy and light sensor | $\bullet + \bullet + \bullet \bullet$ |
| | Casambi Ready air quality sensor | ● ·)) 1 |
| APPLICATION | Casambi App on a smart mobile device *Not mandatory for daily use. | |

Functionality

Casambi App on a Smart Mobile Device

Occupancy Detection

Calendar and Timer

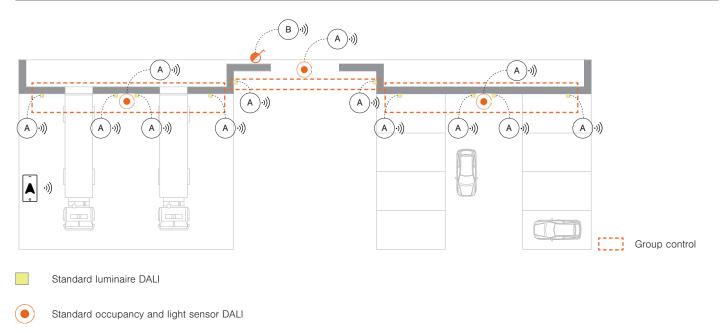


Daylight Harvesting





7. Exterior



Conventional wired switch



(B)·)) Casambi Ready Input controller

Devices

| LUMINAIRE | Standard luminaire DALI | ⊢ + (▲) 10 → (▲) |
|-------------|--|--|
| SENSOR | Standard occupancy and light sensor DALI | • + (A) 3 (A) |
| SWITCH | Conventional wired switch | \checkmark + \textcircled{B} 1 \longrightarrow \textcircled{O} |
| APPLICATION | Casambi App on a smart mobile device *Not mandatory for daily use. | |

Functionality

Casambi App on a Smart Mobile Device

Occupancy Detection

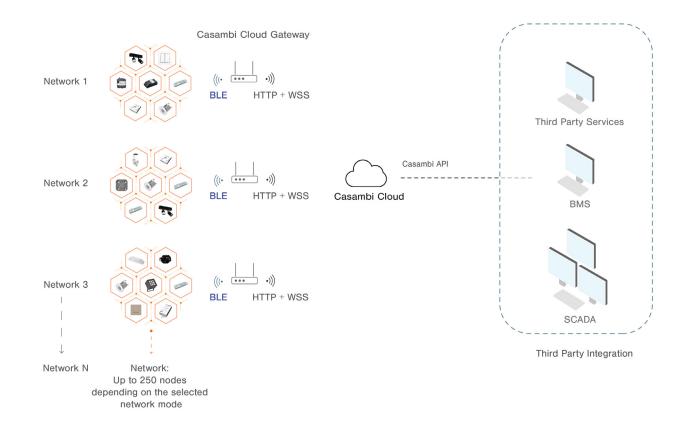


Daylight Harvesting





Linking multiple networks with Casambi Cloud Gateway



Linking multiple networks locally

