interact
by signify

Interact Pro
in industry applications

This is all you need for your smart lighting system

interact ready.

Philips Interact Ready luminaires and sensors + Interact Pro app + Interact Pro web portal + Interact Pro gateway

iF DESIGN AWARD 2023
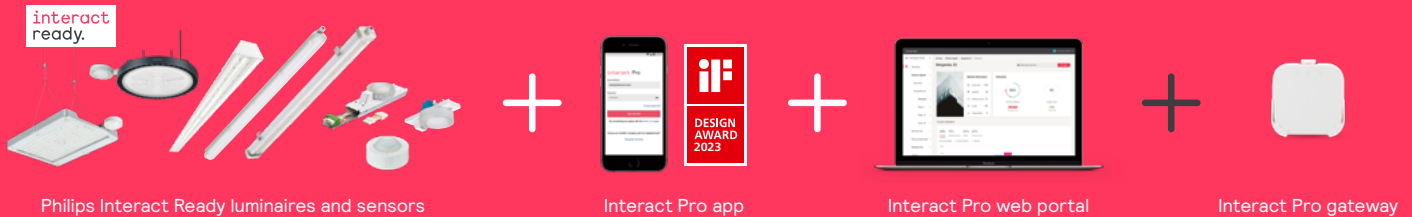
Simple lighting control and automation	Recommended for advanced features

Industrial facilities need high-quality lighting, which has a proven positive effect on productivity and occupational safety. In addition, it's important to keep an eye on the costs associated with managing and maintaining a lighting infrastructure. Interact Pro both ensures high-quality lighting conditions over the lighting system's life and minimizes energy consumption.

Sustainable
- Enable instant energy and cost savings
- Reduce CO_2 emissions and material waste

Smart
- Benefit from remote control and monitoring and reporting capabilities
- Use data to make better informed decisions more quickly

Safe
- Easily set the right lighting conditions to ensure a productive and safe working environment
- Get informed about issues to allow for timely and cost-efficient maintenance

Industry lighting design insights

Uniformity
Use medium or wide beams in order to increase uniformity. High uniformity contributes to a comfortable workplace. For very high installation >10 m, a narrow beam is sufficient.

Controls
Consider placing presence detection sensors near entrances and exits to light up dark areas when needed. Make sure that large furniture and machinery do not block the detection zone.

Illuminance requirements
The EU standard EN12464-1 for lighting planning calls for a minimum of 250 lux at task surfaces in industrial facilities used for open storage. Higher light levels increase visibility and safety, so task lighting levels of ≥300 are recommended.

Waterproof luminaires
Many industrial environments are wet or dusty. Use waterproof luminaires for safe and reliable lighting.
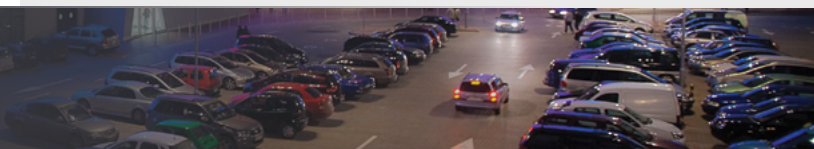
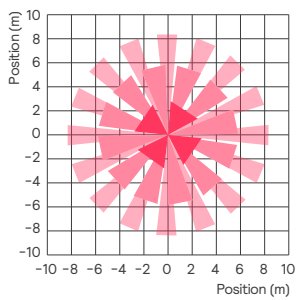# Sensor installation guidance

Easily enhance your smart lighting system with standalone wireless multisensors (CM IP42 WH, IA CM WH 10/1, LCN3110/05, LCN3120/05) or integrated multisensors (LL200E H4, LL500E H4), which are Interact Ready. They trigger automatic responses to turn on, turn off or dim the lights according to occupancy detection and daylight variation. The result? Great energy savings and more control flexibility.

Motion detection area

With integrated multisensor

The image below shows the side and top view of the occupancy coverage based on the industry based NEMA test. It shows that the coverage ratio of the mounting height diameter at ground level is at maximum 1 : 1.1. For example, if the mounting height is 12 m, the maximum diameter coverage is 13.2 m.
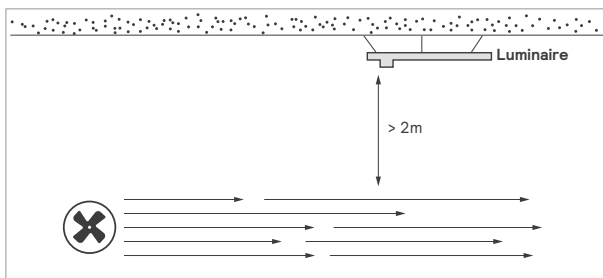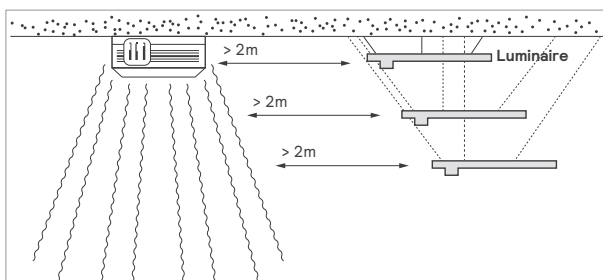
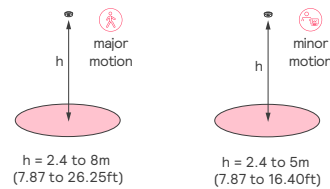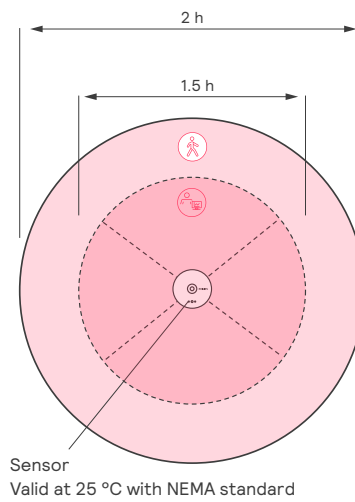**Top coverage pattern**   **Side coverage pattern**
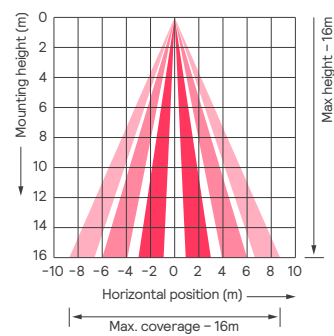
To prevent false triggers, the integrated sensor must be mounted more than 2 m away from air vents in all directions, see below figures.

With standalone wireless multisensor

Field of view – motion

Sensor
Valid at 25 °C with NEMA standard

major motion
h = 2.4 to 8m
(7.87 to 26.25ft)

minor motion
h = 2.4 to 5m
(7.87 to 16.40ft)

Field of view – daylight

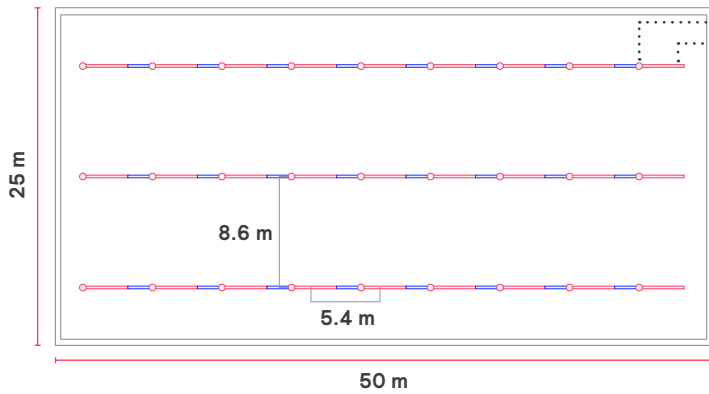h = max. 8m (26.25ft)   min. 0.75 x h

37°

lux
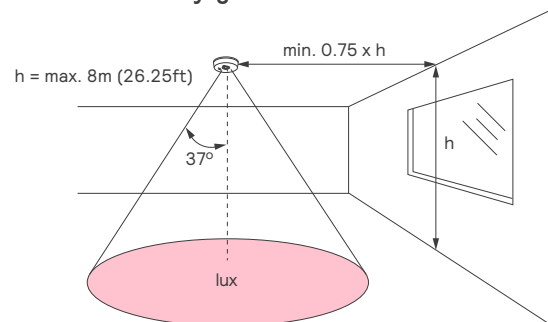
Installation guidance – trunking

Industrial hall with a typical luminaire arrangement and standalone sensors*

Hall height: 9 m; installation height: 8 m

Option 1

25 m

8.6 m

5.4 m

50 m

Product name	Quantity	Order code
CoreLine trunking gen2 LED panel – L3400 (LL234X 160S/840 1x SIA WB 7x1.5 HE)	27	871951473337400
Sensor unit (LL200E H4 7X2.5WH)	27	871951462514300
Starter kit (LL200Z MB-SW 2xEP CU7 WH)	3	871951410819600
Blind unit (LL217X 7x1.5)	24	871951410846200

- One sensor can control up to 4 SIA drivers
- Disconnect the DALI line with the supplied DALI splitter

Option 2

25 m

8.6 m

4.6 m

50 m
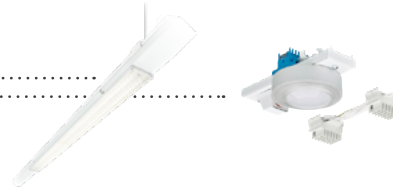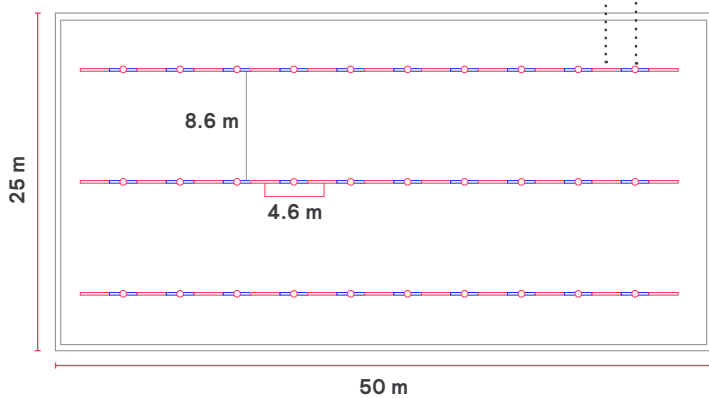
Product name	Quantity	Order code
Maxos fusion LED panel – L2300 (LL523X LED160S /840 SIA WB 7 WH XA)	33	(Configured product)
Sensor unit (LL500E H4)	30	871951477279300
Rail 4.6m – 7 wires (LL546T 4x2.5+2x1.5 Gen2 WH)	30	872016942520099
Rail 2.3m – 7 wires (LL523T 4x2.5+2x1.5 Gen2 WH)	3	872016942518799
Starter kit incl. end caps (LL500Z 2xEP CU Gen2 WH)	3	872016942549199
Chain bracket adjustable (LL500Z CB-CH WH)	36	871869637460399
Blind cover L= 2.3m (ILL500Z BC L2300 WH)	30	871869638354400

- One sensor can control up to 4 SIA drivers
- Disconnect the DALI line with the supplied DALI splitter

Option 3

25 m

8.6 m

4.6 m

50 m
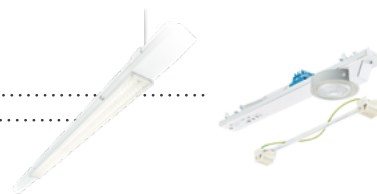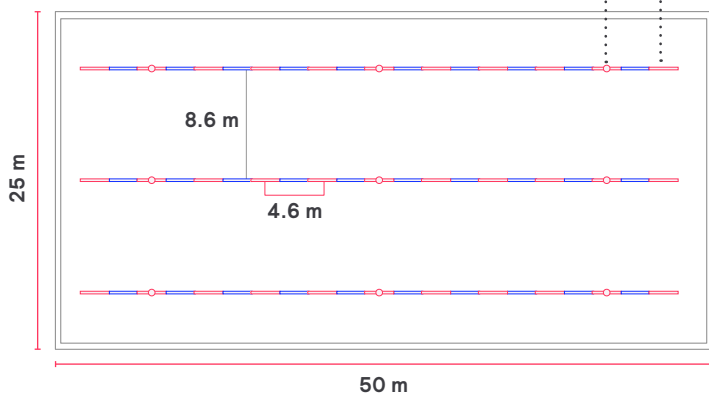
Product name	Quantity	Order code
Maxos fusion LED panel – L2300 (LL523X LED160S/840 DIA WB 7 WH XA)	33	(Configured product)
Sensor unit (LL500E H4 SR2DALI)	9	872016947110800
Rail 4.6m – 7 wires (LL546T 4x2.5+2x1.5 Gen2 WH)	30	872016942520099
Rail 2.3m – 7 wires (LL523T 4x2.5+2x1.5 Gen2 WH)	3	872016942518799
Starter kit incl. end caps (LL500Z 2xEP CU Gen2 WH)	3	872016942549199
Chain bracket adjustable (LL500Z CB-CH WH)	36	871869637460399
Blind cover L= 2.3m (ILL500Z BC L2300 WH)	30	871869638354400

- One sensor can control up to 20 DIA drivers
- Disconnect the DALI line with the supplied DALI splitter

Benefit of options 1 and 2:
- Maximize energy savings with higher density of sensors

Benefits of option 3:
- Lower investment due to reduced sensor density
- Moderate energy savings

☐ LED unit/panel   ☐ Blind cover   ○ External sensor

* This meets the modified lighting requirements for an industrial storage hall: Average 300 lux on working plane, 100 lux at wall, 50 lux at ceiling. Sensor design ensures full detection coverage in hall.
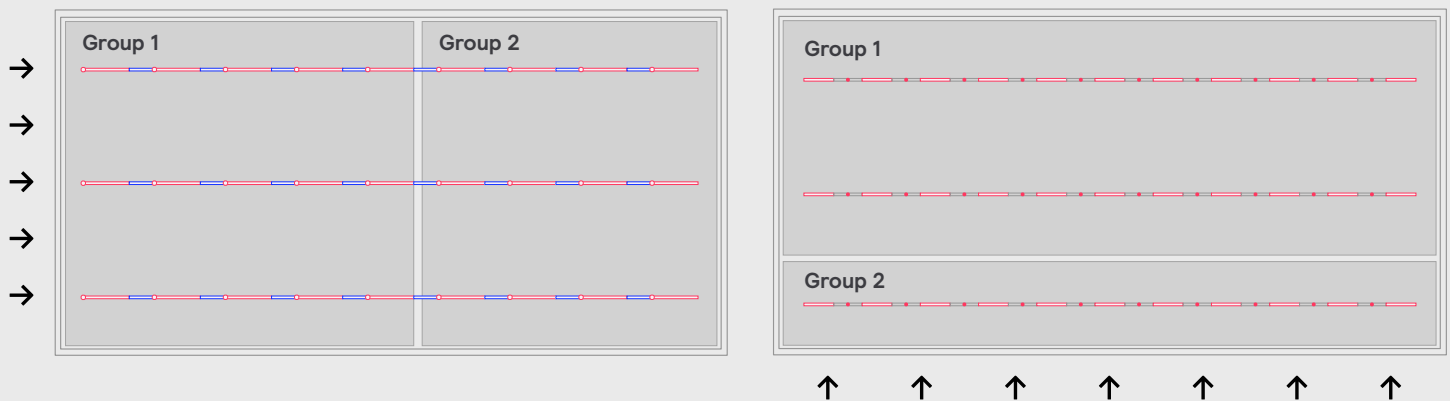
Installation guidance – trunking

Define groups

Once all luminaires and sensors are installed and the devices are discovered via the Interact Pro app, you can assign them to groups. You can assign specific switching behavior to each group. Only the sensor devices are shown in the app. The luminaires are controlled via the sensor devices. You can connect up to four luminaires to each sensor, but they appear as a single device in the app. Refer to the user manual for more information:
https://sme.interact-lighting.com

Configuration example

In this example, sensor devices are assigned to two groups. When there is no activity in the hall, the light dims to vacant level (10%). When movement is detected in group 1, the light in group 1 boosts to task level (100%) while the light in group 2 remains at vacant level. When movement is detected in group 2, the light in group 2 also boosts to task level. After a hold time period without any movement (15 min) in a group, the light dims to background level (50%). The light remains at this level during a prolong time period (5 min). After the prolong time expires, the light dims to vacant level again.

Parameters info

Light level (Max 100%)
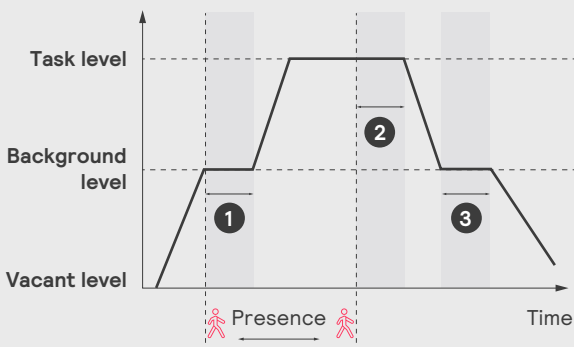
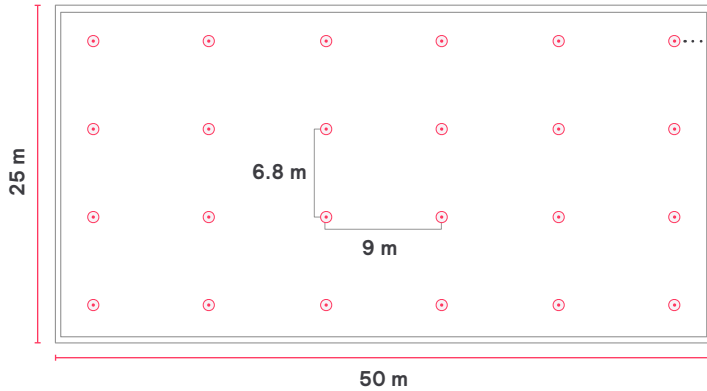1. Dwell time   2. Hold time   3. Prolong time

----- Task level is dynamic when daylight regulating sensors are applied.

| LED unit/panel | Blind cover | ○ External sensor | Group (behavior Area Auto On Auto Off) |

Installation guidance – highbays

Industrial hall with a highbay luminaire arrangement (sensor integrated)*

Hall height: 11 m; installation height: 10 m

Option 1

CoreLine highbay gen5	Quantity	Order code
BY122X G5 LED200S/840 SIA WB H4	24	871951495593600

25 m · 50 m · 6.8 m · 9 m

Option 2
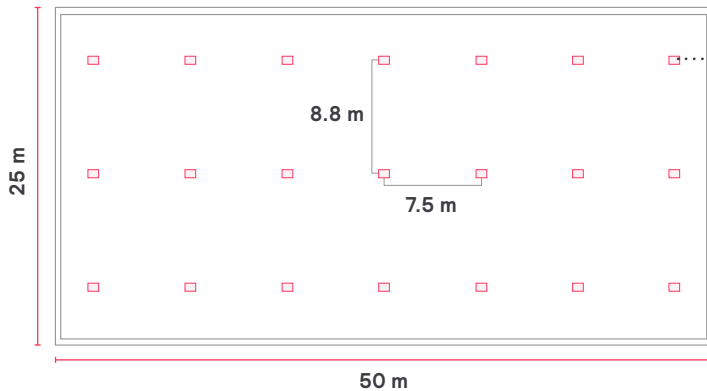
GentleSpace gen3	Quantity	Order code
BY481X LED250S/840 MB	21	(Configured product)

25 m · 50 m · 8.8 m · 7.5 m

Benefits of GentleSpace:
- 30% less installed power (with GentleSpace HE version)
- 12.5% fewer luminaires needed

* This meets the modified lighting requirements for an industrial storage hall: Average 300 lux on working plane, 100 lux at wall, 50 lux at ceiling. Sensor design ensures full detection coverage in hall.
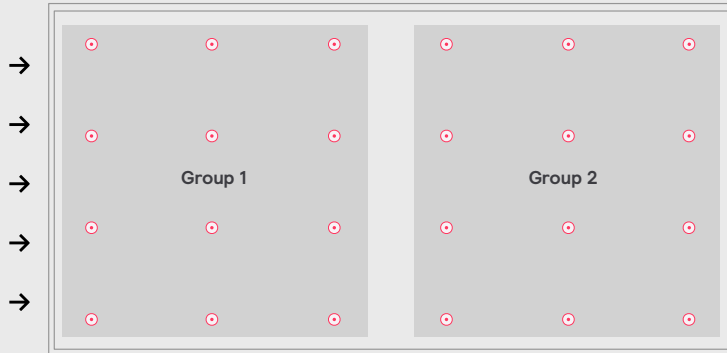
Luminaires with integrated sensor

Installation guidance – highbays

Define groups

Once all luminaires with integrated sensors are installed and discovered via the Interact Pro app, you can assign them to groups. You can assign specific switching behavior to each group. Refer to the user manual for more information:
https://sme.interact-lighting.com

Configuration example 1

In this example, highbay luminaires are assigned to two groups. When there is no activity in the hall, the light dims to vacant level (10%). When movement is detected in group 1, all highbays in group 1 boost to task level (100%) while the lights in group 2 remain at vacant level. When movement is detected in group 2, the light in group 2 also boosts to task level. After a hold time period without any movement (15 min) in a group, the light dims to background level (50%). The light remains at this level during a prolong time period (5 min). After the prolong time expires, the light dims to vacant level again.
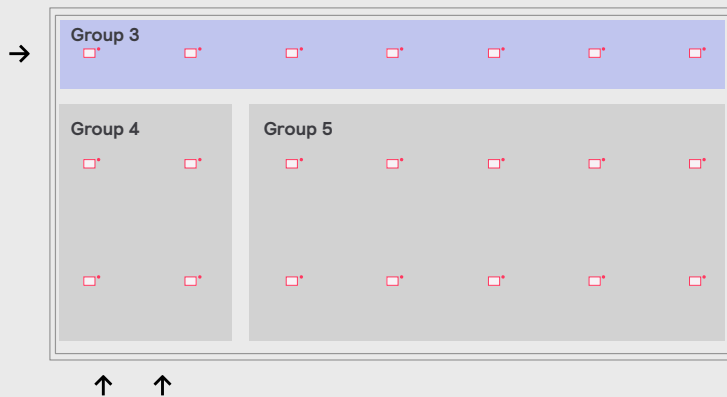
Configuration example 2

In this example, highbay luminaires are assigned to groups 3, 4 and 5. When there is no activity in the hall, the light dims to vacant level (10%). When someone enters the hall via group 4, the integrated movement sensors boost all highbays in group 4 boost to task level (100%) while the lights in groups 3 and 5 remain at vacant level. The highbays in group 3 behave independently from one another, and are not linked to group 4 and 5. For example, when movement is detected around the topmost highbay on the left, only this highbay will boost to task level, while the other highbays in group 3 remain at background level.

Luminaires with integrated sensor

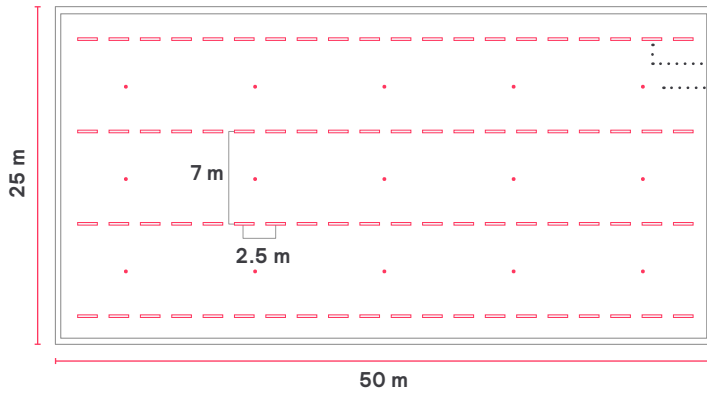Group (behavior Area Auto On Auto Off)

Group (behavior Light Auto On Auto Off)

Installation guidance – waterproofs

Industrial hall with a typical luminaire arrangement and standalone sensors*
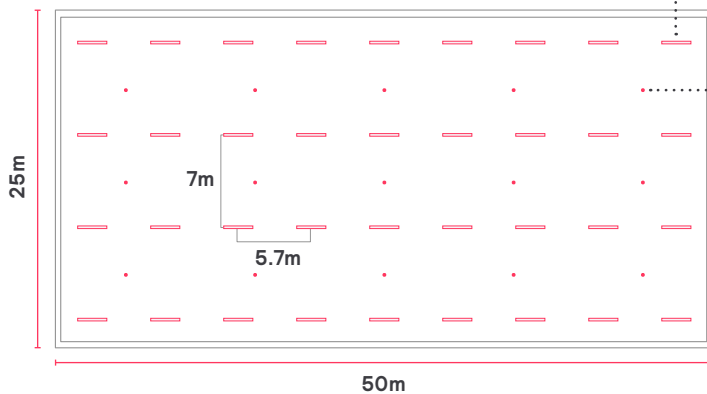
Hall and installation height: 6 m

Option 1

25 m

7 m

2.5 m

50 m

Product name	Quantity	Order code
CoreLine waterproof (WT120C G2 LED80S/840 WIA L1500)	80	871951496534800
Occupancy sensor IA CM IP65 WH (LCN3110/05)	15	913701043903
Alternative sensor incl. daylight detection		
Occupancy-daylight Sensor IA CM IP65 WH (LCN3120/05)	–	913701044003

Option 2

25 m

7m

5.7m

50m

| Product name	Quantity	Order code
Pacific LED gen5 (WT490C LED150S/840 SIA WB IA9 PI5 L1800)	36	(Configured product)
Occupancy sensor IA CM IP65 WH (LCN3110/05)	15	913701043903
Alternative sensor incl. daylight detection		
Occupancy-daylight Sensor IA CM IP65 WH (LCN3120/05)	–	913701044003

Benefits of Pacific LED gen5:
- 24% less installed power
- 55% fewer luminaires needed due to higher lumen package
- More eye comfort due to lower direct glare

* This meets the modified lighting requirements for an industrial storage hall: Average 300 lux on working plane, 100 lux at wall, 50 lux at ceiling. Sensor design ensures full detection coverage in hall.

Waterproof luminaire   ● External sensor

# Installation guidance – waterproofs

Define groups

Once all luminaires are installed and discovered via the Interact Pro app, you can assign them to groups. You can assign specific switching behavior to each group. Then you can add external ZGP sensors to your groups. Each group can have maximum of 40 luminaires and 5 external ZGP sensors. On a Zigbee network, you can connect maximum of 200 lights and 30 ZGP sensors. You can create a maximum of 20 networks per project.
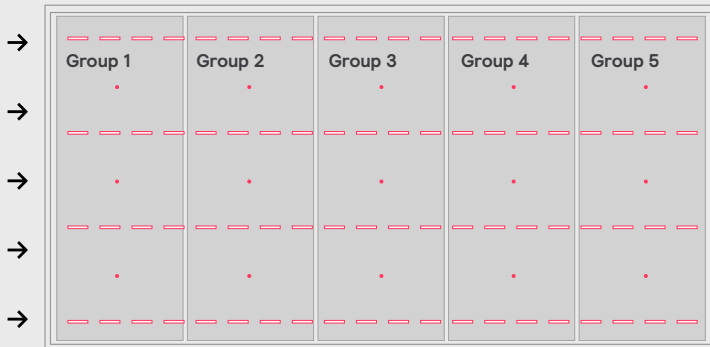
Configuration example 1

In this example, CoreLine waterproof luminaires are assigned to five different groups. Each group is connected to thre external occupancy sensors to ensure full detection coverage. When there is no activity in the hall, the light dims to vacant level (10%). When movement is detected in group 1, the light in this area boosts to task level (100%) while all other groups remain at vacant level. When movement is detected in another area, the light in that area also boosts to task level. After a hold time period without any movement (15 min), the light dims to background level (50%). The light remains at this level during a prolong time period (5 min). After the prolong time expires, the light dims to vacant level again.
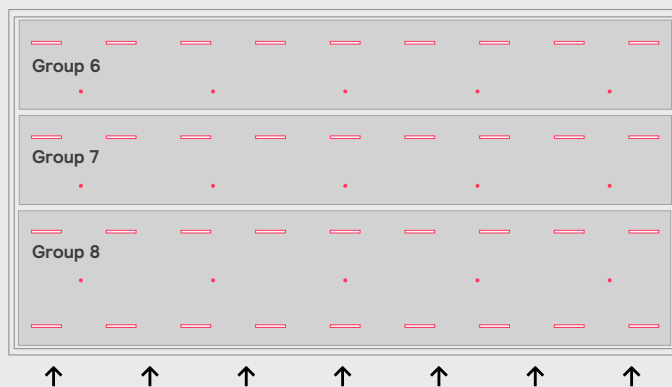
Configuration example 2

In this example, Pacific LED luminaires and external sensors are assigned to groups 6, 7, and 8. Each group is connected to five external occupancy sensors to ensure full detection coverage. When there is no activity in the hall, the light dims to a vacant level (20%). When movement is detected in group 8, the light in this area boosts to task level (80%) while groups 6 and 7 remain at vacant level. When movement is detected in another area, the light in that area also boosts to task level. After a hold time period without any movement (10 min) in a group, the light dims to background level (30%). The light remains at this level during a prolong time period (5 min). After the prolong time expires, the light dims to vacant level again.

▭ Waterproof luminaire   ● External sensor   ▢ Group (behavior Area Auto On Auto Off)

Interact Pro for outdoor applications

Extend your smart lighting to the building perimeter and outdoor parking spaces

The new Philips outdoor parking sensor attaches seamlessly to a wide range of Philips luminaires with a Zhaga book 18 bottom socket to quickly extend your smart lighting system from the inside to the outside. This setup requires no additional wiring as the SR(D4i) driver for Philips luminaires provides auxiliary power to the sensor.

Philips outdoor parking sensor

- Motion and daylight sensing for greater energy savings and increased safety
- Daylight switching automatically turns off lights when daylight is sufficient
- Fits with existing luminaire families via a Zhaga book 18 socket (requires a Zhaga socket in the luminaire and an SR(D4i) driver for Philips luminaires)
- Easy "twist and lock" installation
- IP66 rating
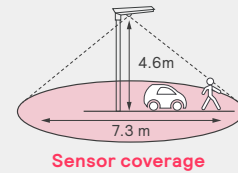- Available in black and white

High- and lowbay compatible

The sensor is available in two versions, covering installation heights from 4.6m to 12.2m for greatest flexibility.
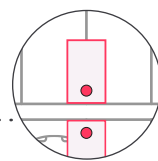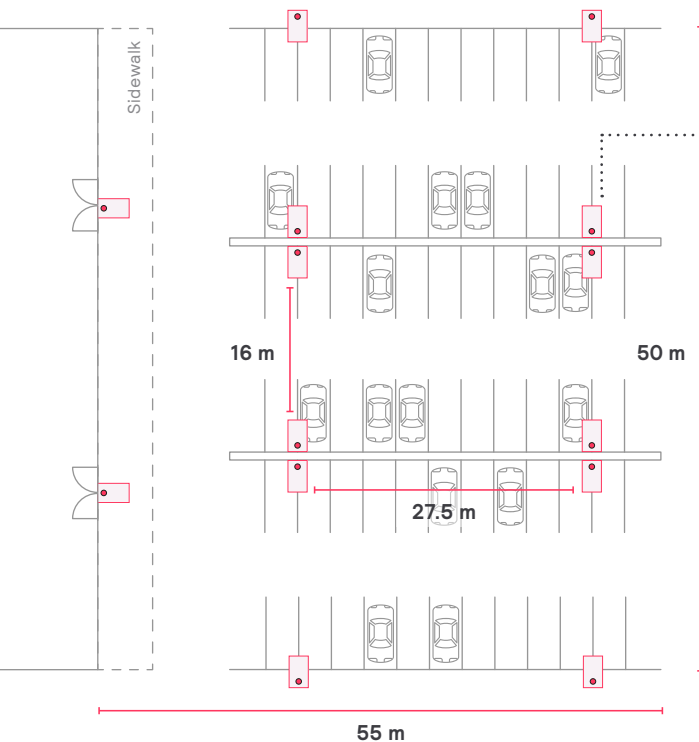
Highbay mounted

12.2m

15.2 m

Sensor coverage

Lowbay mounted

4.6m

7.3 m

Sensor coverage
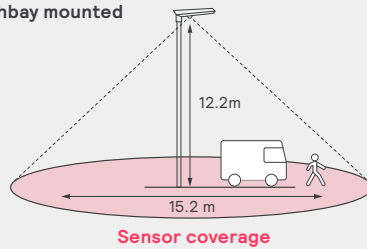
Perimeter area around a building with a typical luminaire arrangement

interact ready.

lighting available from

PHILIPS

Sidewalk

16 m

50 m

27.5 m

55 m

Luminaire according to need and budget with sensor attached

Exemplary luminaire pairing

Budget: € € ○

Product name	Quantity	Order code
Philips Luma gen2 medium BGP704 T25 LED110-4S/740 PSD-SR DW50 FG	4	available via configuration
Philips Luma gen2 medium BGP704 T25 LED75-4S/740 PSD-SR DW50 FG	8	available via configuration
Philips Luma gen2 micro BGP702 T25 LED12-4S/740 PSD-SR DW50 FG	2	available via configuration
Philips outdoor parking sensor, black LCN4120/15 lowbay	2	913701063313
Philips outdoor parking sensor, black LCN4150/15 highbay	12	913701063413

Other possible pairings with Philips luminaires with a Zhaga book 18 bottom socket: Lumistreet gen2, Digistreet, Iridium gen4, Clearway gen2, Urbanflex, Milewide

Product overview

Below is a selection of Philips Interact Ready products that are suitable for an industrial environment.

Highbays – waterproofs

GentleSpace *	CoreLine highbay *

Trunking systems

Maxos fusion	Maxos LED Industry	CoreLine trunking

Linear waterproofs

Pacific LED	CoreLine waterproof

Lamps

MasterConnect LEDtube T8 *

Controls

Interact Ready RF DALI Connector	Philips wireless sensors (CM IP42 WH, IA CM WH 10/1, LCN3110/05, LCN3120/05)	Philips wireless switches (UID8470 & 8480)

Sensor units

LL200E H4	LL500E H4	LL500HE H4 SR2DALI

New Outdoor parking sensor

LCN4120/05 LCN4150/05	LCN4120/15 LCN4150/15

Gateway

Interact Pro wireless gateway

Exemplary outdoor luminaires with downward–facing socket compatible with the Philips outdoor parking sensor

Luma Gen 2	Milewide

* Luminaires with integrated sensor

Tip: How to read our product type designations

You might stumble across the following abbreviations in the product names in the order lists of Philips Interact Ready products. Thanks to our legend, you can always order the right product with confidence.

U4 = Office sensor, with upgradable sensor slot

H4 = Highbay sensor

WIA = Wireless driver, Interact Ready

IA4 = Office sensor

iF DESIGN AWARD 2023

Conference room
75% dim level

interact by signify