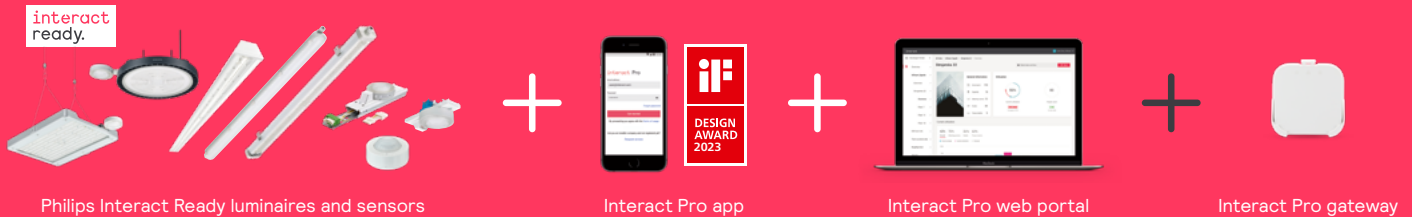


Interact Pro in industry applications

This is all you need for your smart lighting system



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 CO₂ 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

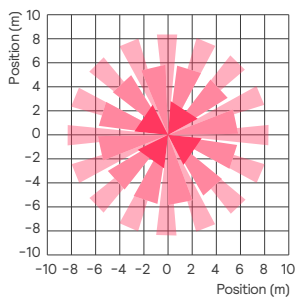
Easily enhance your smart lighting system with standalone wireless multisensors (CM IP42 WH, IA CM WH 10/1, LCN3110/05, LCN3120/05) or integrated multisensors (LL200E H4, LL500E H4), which are Interact Ready. They trigger automatic responses to turn on, turn off or dim the lights according to occupancy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

Motion detection area

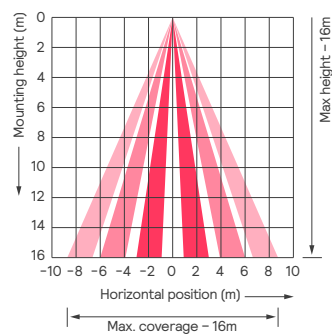
With integrated multisensor

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.

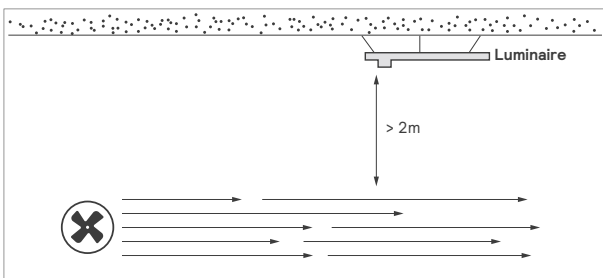
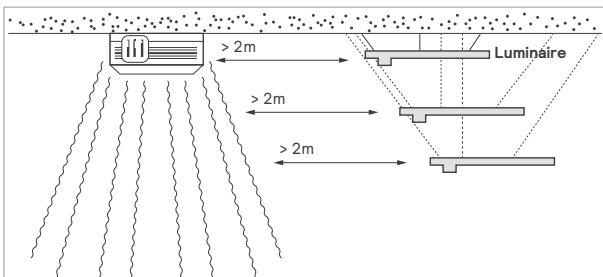
Top coverage pattern



Side coverage pattern

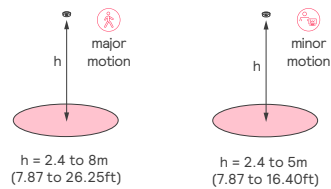
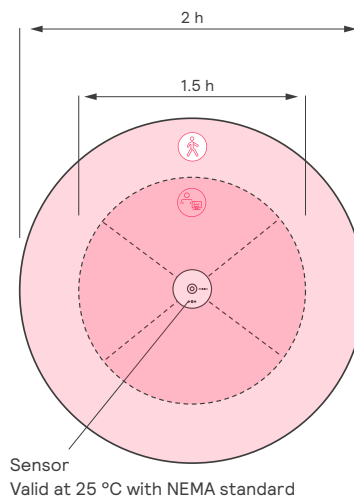


To prevent false triggers, the integrated sensor must be mounted more than 2 m away from air vents in all directions, see below figures.

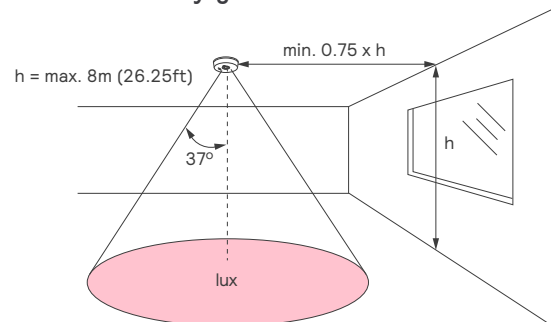


With standalone wireless multisensor

Field of view - motion



Field of view - daylight

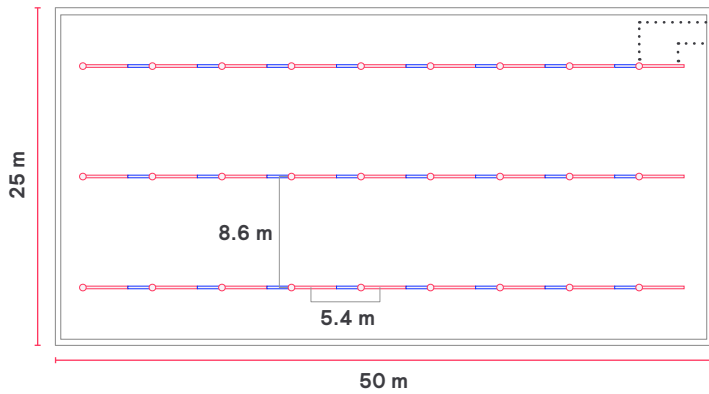


Installation guidance – trunking

Industrial hall with a typical luminaire arrangement and standalone sensors*

Hall height: 9 m; installation height: 8 m

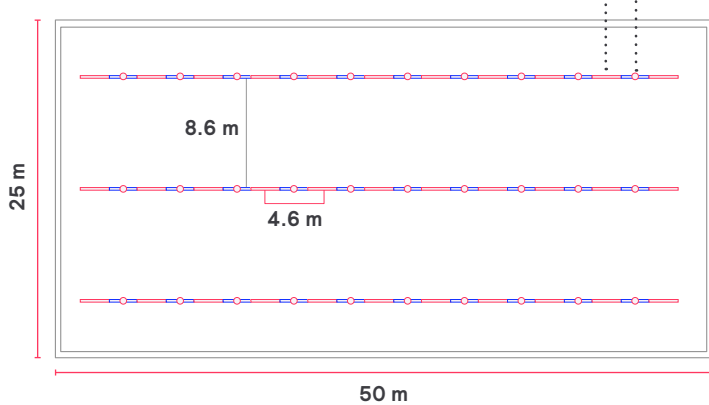
Option 1



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

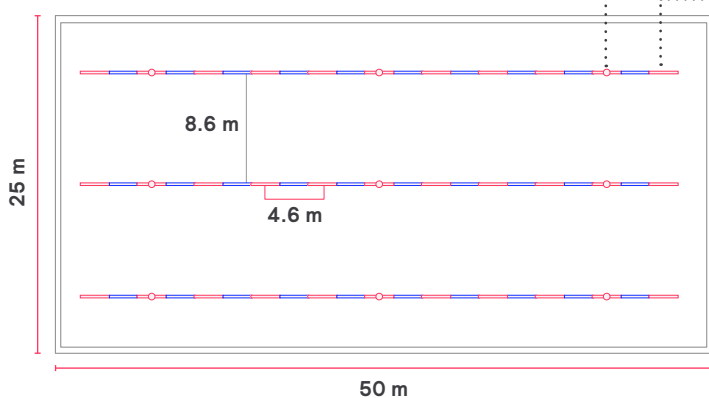
Option 2



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



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

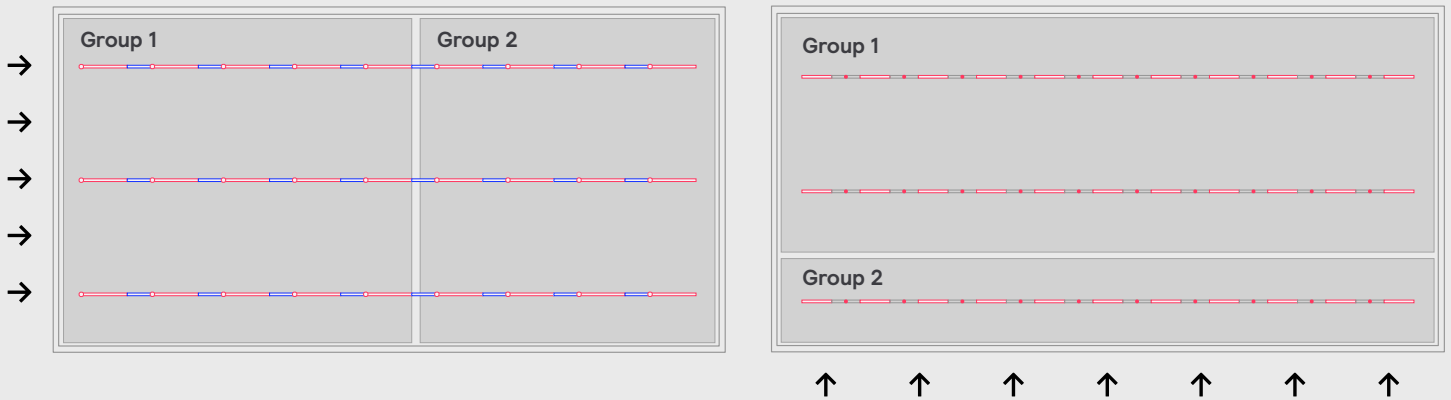
Define groups

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>

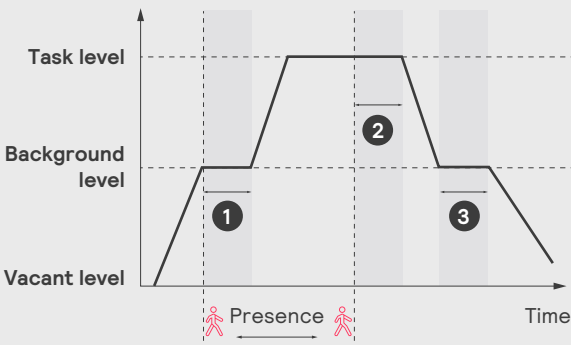
Configuration example

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

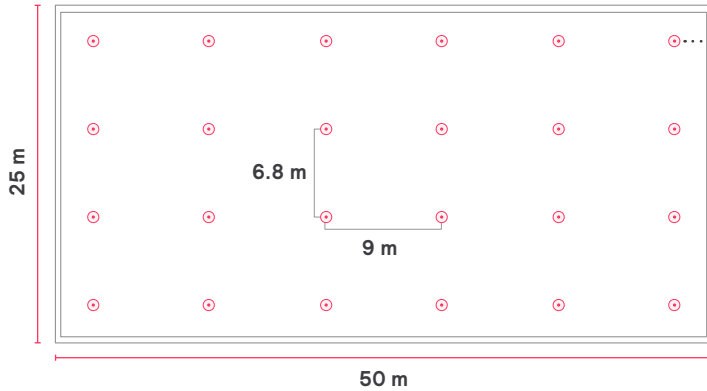
----- Task level is dynamic when daylight regulating sensors are applied.

Installation guidance – highbays

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

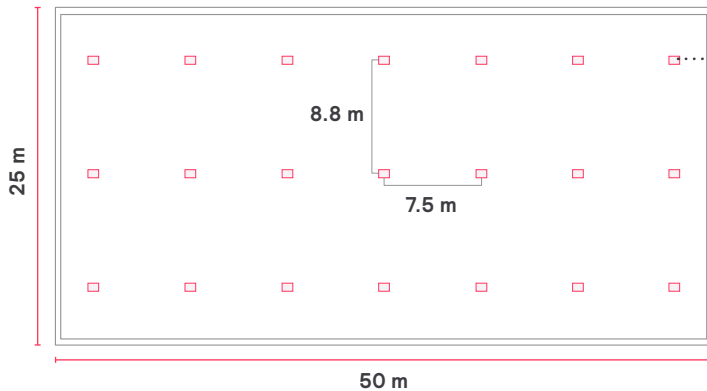
Hall height: 11 m; installation height: 10 m

Option 1



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

Option 2



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

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.



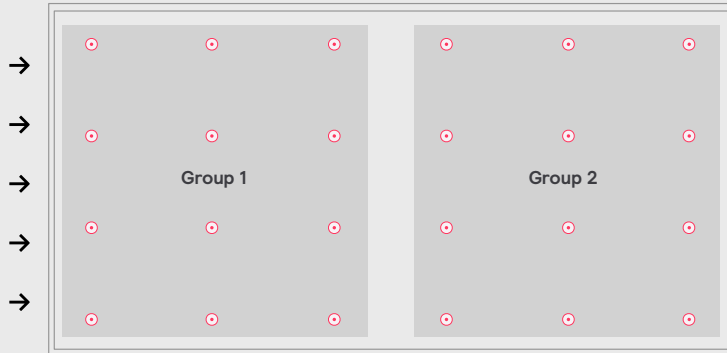
Luminaires with integrated sensor

Installation guidance – highbays

Define groups

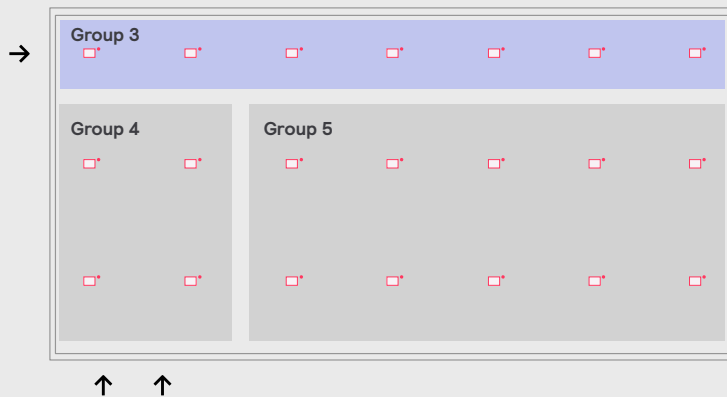
Once all luminaires with integrated sensors are installed and discovered via the Interact Pro app, you can assign them to groups. You can assign specific switching behavior to each group. Refer to the user manual for more information:

<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)



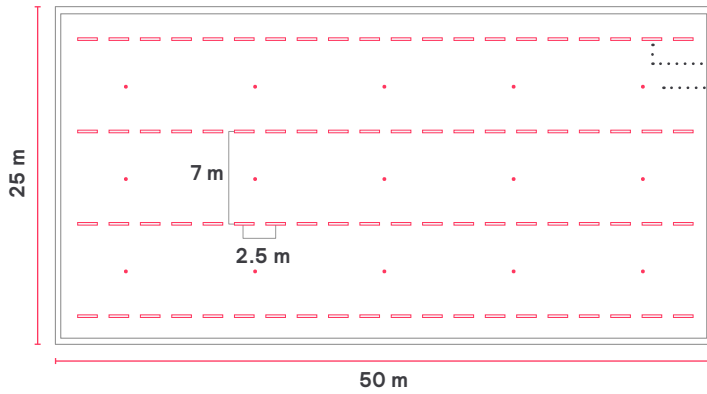
Group (behavior Light Auto On Auto Off)

Installation guidance – waterproofs

Industrial hall with a typical luminaire arrangement and standalone sensors*

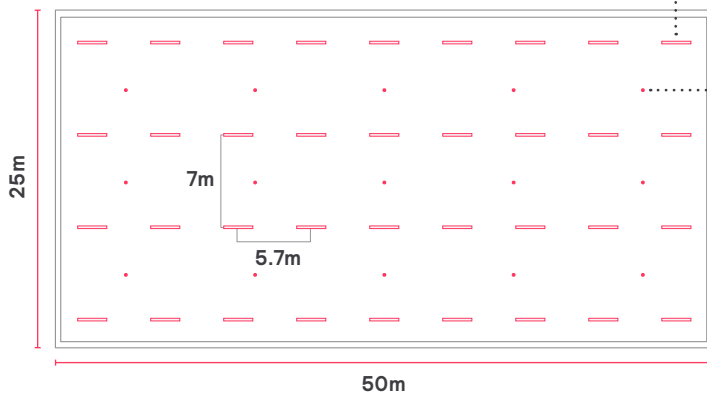
Hall and installation height: 6 m

Option 1



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



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:

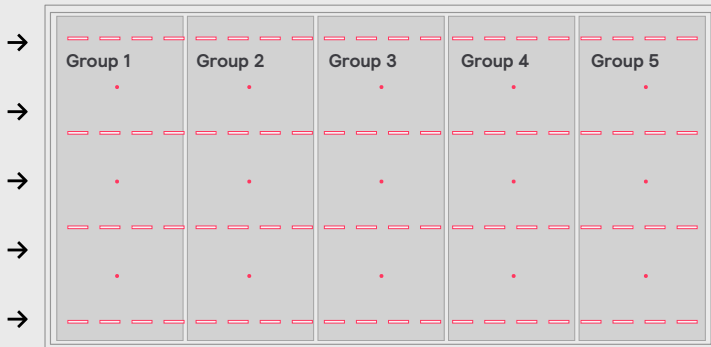
- 24% less installed power
- 55% fewer luminaires needed due to higher lumen package
- More eye comfort due to lower direct glare

* 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.

Installation guidance – waterproofs

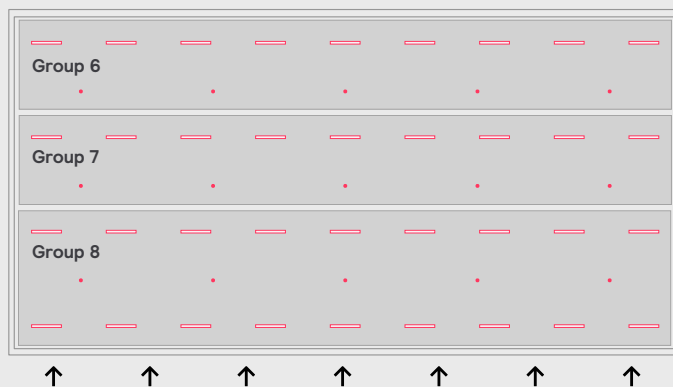
Define groups

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 three 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.

Industry product overview






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

interact ready. lighting available from

PHILIPS

Highbays - waterproofs

Trunking systems

				
GentleSpace	CoreLine highbay	Maxos fusion	Maxos LED Industry	CoreLine trunking

Linear waterproofs

Lamps

Controls

					
Pacific LED	CoreLine waterproof	MasterConnect LEDtube T8	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

Gateway

			
LL200E H4	LL500E H4	LL500HE H4 SR2DALI	Interact Pro wireless gateway

* 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



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