

PHILIPS

Sensors

EasyAir

Occu-DL BP IP20 sensor MC



Datasheet

EasyAir Occu-DL BP IP20 sensor MC

Philips EasyAir wireless multi sensors with presence detection and daylight based light regulation can be added to wireless lighting systems set up with Philips MasterConnect app. The sensors are mounted stand-alone without the need of a power supply. They trigger automatic responses to turn on/of or dim the lights according to occupancy detection and daylight variation - for more energy savings and enhanced flexibility in your space! This second generation sensor replaces the EasyAir Occu-DL ZGP sensor MC.

January 2025

Product Features

Occupancy Detection

- Passive Infrared (PIR) technology to detect occupancy accurately.
- Adjustable sensitivity. Minimum false trigger.
- 40 sqm Field-of-View at typical mounting height.

Daylight Sensing

- High accuracy of ambient light measurement from 1-2000 LUX
- Closed loop daylight regulation

Installation

- Battery-powered, no mains wire required.
- Quick and easy mounting with tapes or screws.
- Walk test mode available for optimal detection.
- Indoor use only.

Environment

- No Mercury.
- Low Carbon Footprint.

Connectivity

- 2.4GHz mesh networking technology.
- Reliable and secure wireless communication, nominal range 15m.
- Easy commissioning.

Control Functionality

- Automatic light control based on occupancy detection and daylight sensing.
- Adjustable sensor parameters for personalized lighting behaviors.

Reliability

- Reliable operation between -5°C and +45°C ambient temperature.
- Battery lifetime above 8 years. Minimum maintenance. ^[1]
- IP20 (IEC standard 60529)

[1]: As calculated in typical conference room application.

Order Information

Commercial product name	Colour	Description	EOC	12NC	Carton Quantity
EasyAir Occu-DL BP IP20 sensor MC	White	Wireless standalone office sensor, Occupancy sensing and daylight based regulation	8721103048752	929003866106	10 pcs

Product data

Physical information

Overall Dimensions	D 86.5 mm x 29.9 mm
Net Weight per Piece	106 gr
Color	White

Occupancy Sensing

Type	Passive infrared (PIR)
FOV occupancy detection at h = 2.5 m	40 sqm
Hold Time	6 - 100 minutes
Prolong Time	2 - 100 minutes + infinite
Grace Fading	1 - 25 seconds
Fading to Switch On/Off	1 second

Daylight Sensing

Daylight based control	Enabled/disabled. Default Enabled with target light level of “~500lux X Eco-ON%”.
Calibration	Selectable. Light Level calibrated to “Max light output from fixture X Eco-ON%”.
Viewing Angle	70°
Daylight level	<= 2000 lux

Environment & Approbation

Operating Ambient Temperature Range	-5 °C to 45 °C
Storage Temperature	-25 °C - 65 °C
Ingress Protection	IP20
Approbations	CE, UKCA, RoHS
Warranty	5 years

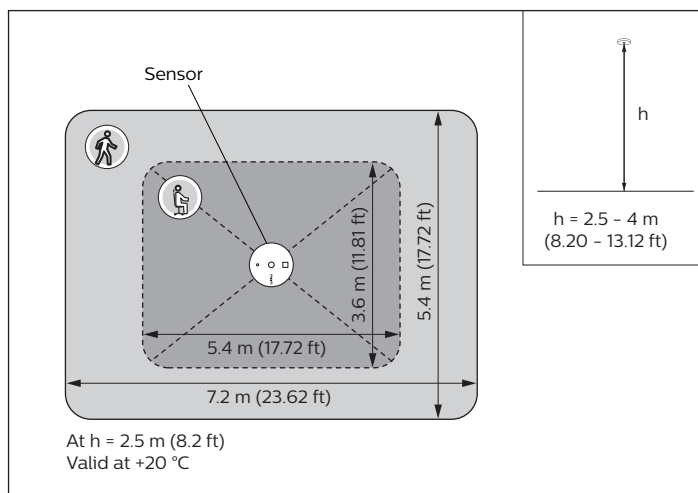
Other

Wireless protocol	2.4 GHz, IEEE 802.15.4
Encryption	AES - 128
Battery lifetime	>8 years (at 25°C)
Mounting height	2.5 m - 4 m
Max Distance Sensor-to-Luminaire	15 m line-of-sight
Field Configuration	via BLE, parameters set via Philips MasterConnect app
Max number of sensors in group	15 (devices on FW 2 or FW 3), 5 (devices on FW 1), together with ZGP switches, see MasterConnect installer manual
Max number of sensors in zone	5, together with ZGP switches

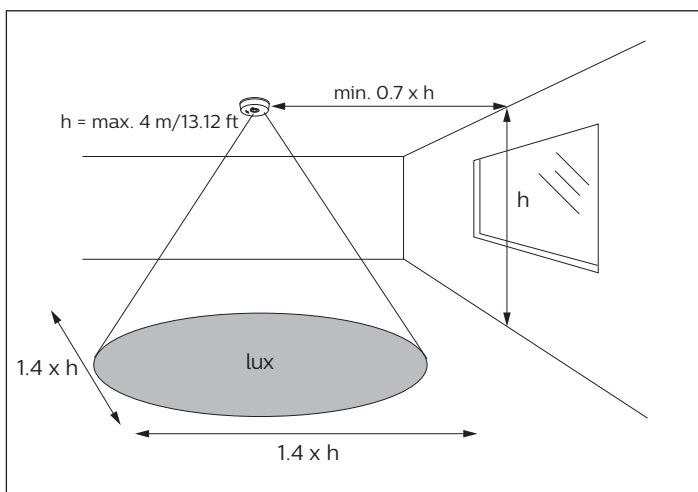
Field-of-View

- Field-of-view (FOV) for motion detection is determined at typical height ($h=2.5\text{m}$) for major and minor motion with NEMA tests, respectively. Daylight FOV is for multi sensor only.

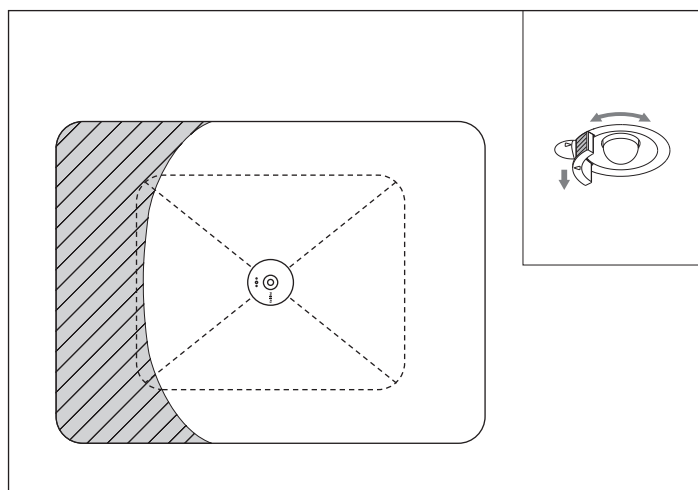
Motion FOV



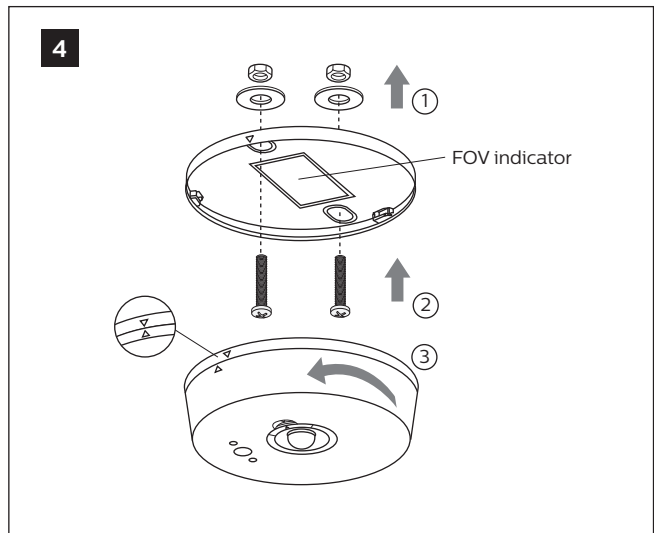
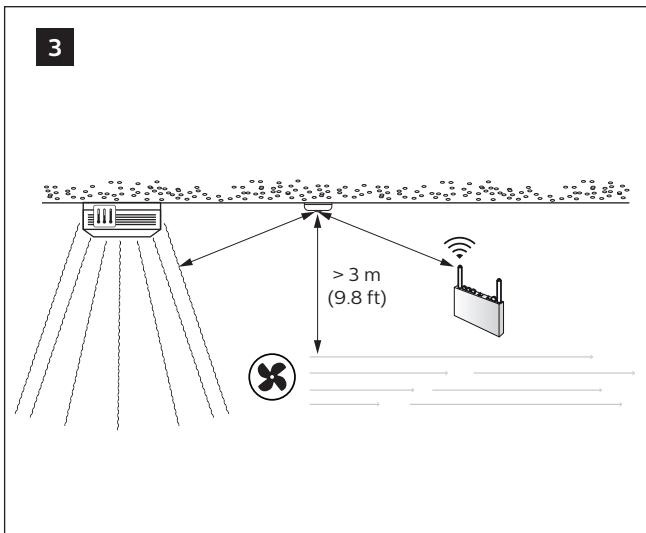
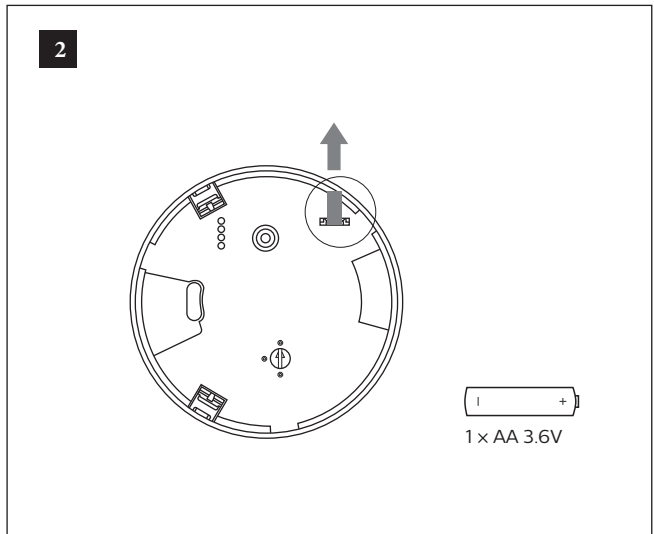
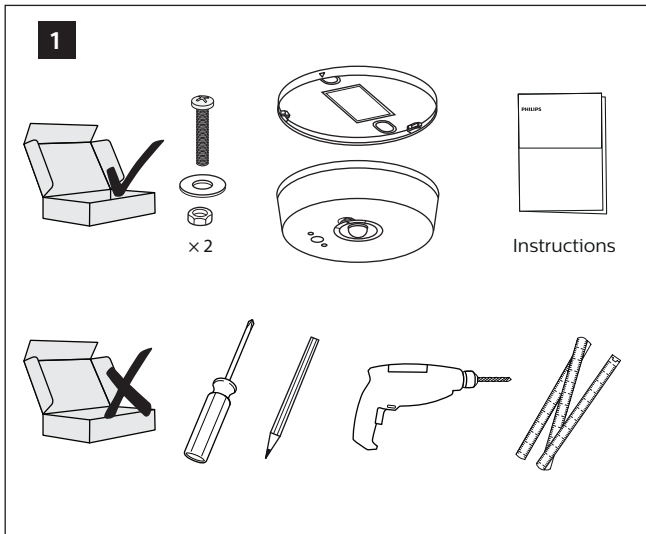
Daylight FOV



- Motion FOV can be reduced using the plastic shield around the lens.



Installation Instructions



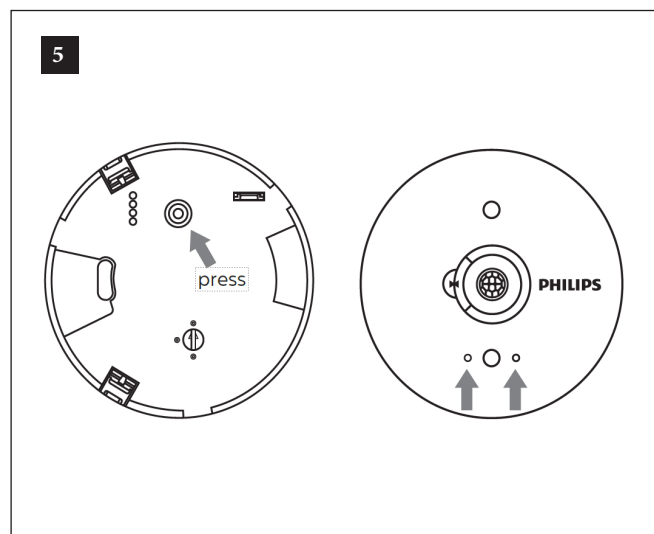
Commissioning instruction for MasterConnect system:

If the sensor is factory new with the plastic battery shield still inserted:

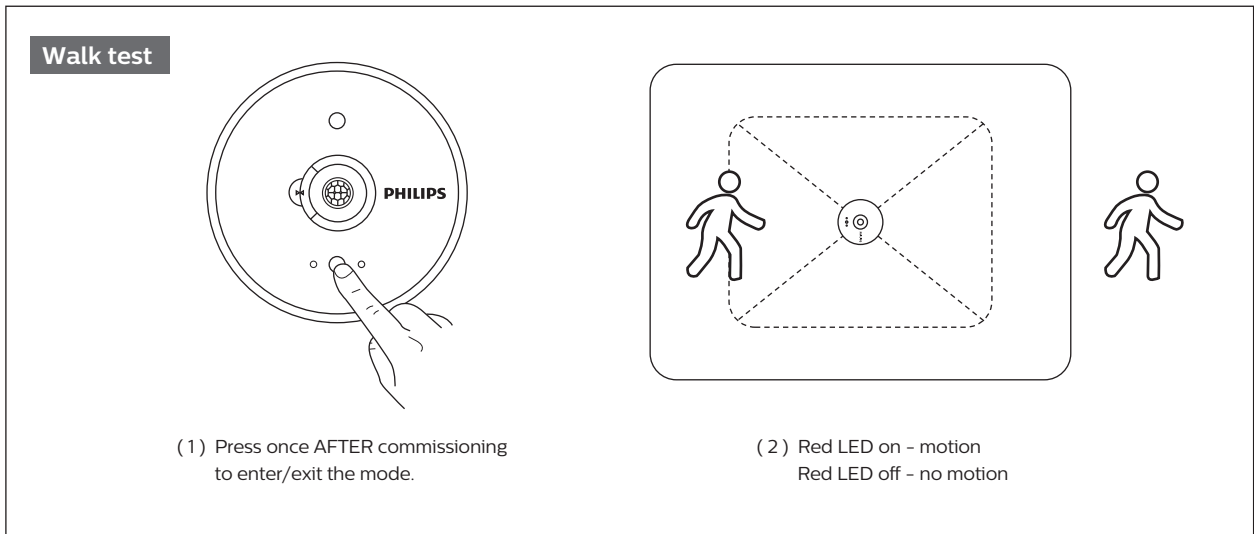
1. Commission the lights using the MasterConnect app.
2. Select the sensor in the MasterConnect app.
3. Pull out the plastic strip (see fig. 1). Within a few seconds the app feeds back that the sensor was found and the sensor is commissioned automatically.
4. Mount the sensor at the ceiling.

If the sensor is not factory new:

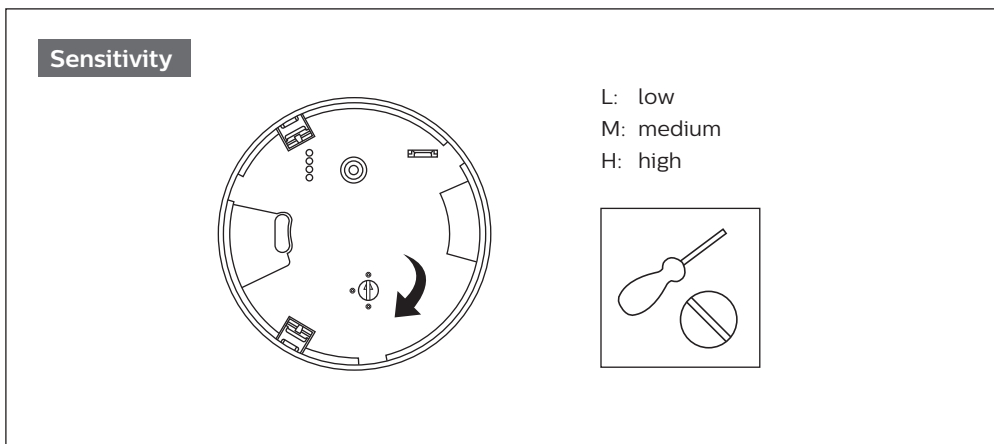
1. Commission the lights using the MasterConnect app.
2. Select the sensor in the MasterConnect app.
3. Press the pinhole reset button at the rear side of the sensor until the red and green LED have lighted up twice (see fig. 6). Within a few seconds the app feeds back that the sensor was found and the sensor is commissioned automatically. Mount the sensor at the ceiling.
- 4.



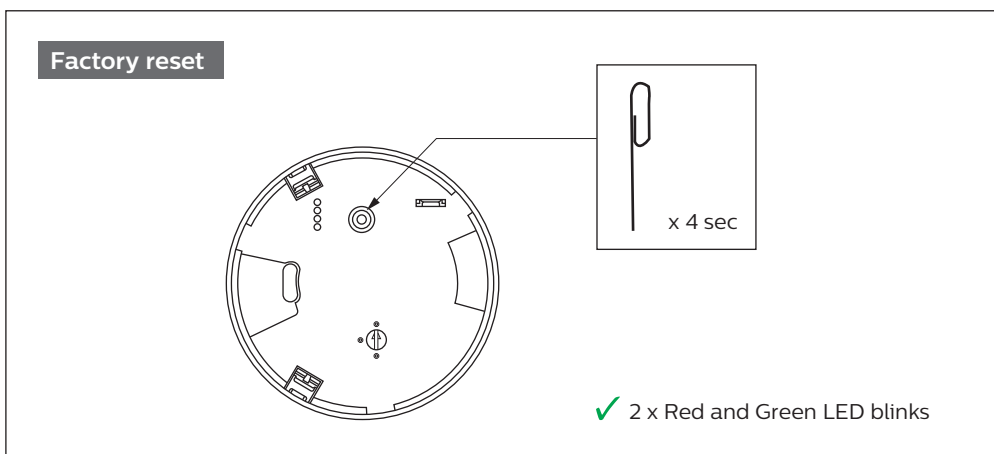
- A walk test will help to determine the optimal location to place the sensor by quickly testing the occupancy detection coverage. It's ONLY possible after sensor has been commissioned.



- If needed, the sensitivity for motion detection can be adjusted with the dial at the back. Three sensitivity levels are available from Low, Medium to High (High as default).



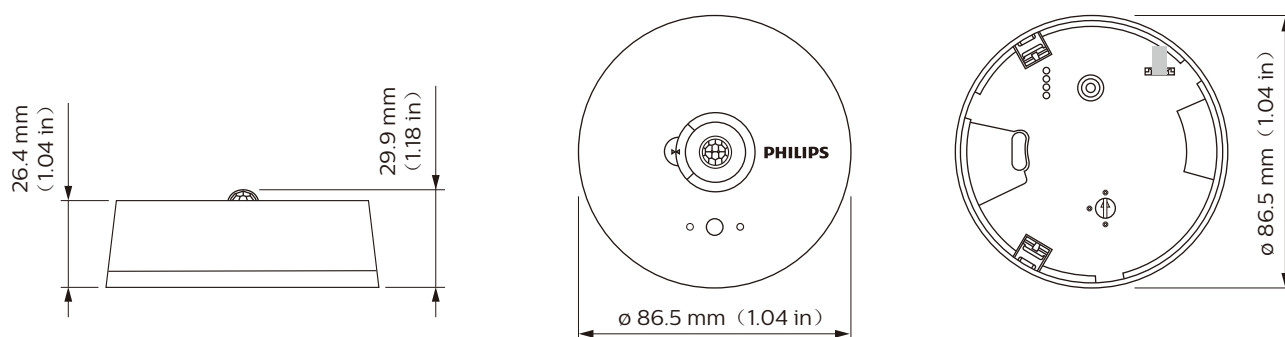
- Performing factory reset will restore sensor to un-commissioned status. Sensor will be removed from current network (if any).



LED indicator

LED pattern	
Green LED blinks every 10s	Ready for commissioning
Green LED blinks every 2s	Commissioning in progress
Green LED flash × 2	Commissioning successful
Red LED flash × 2	Commissioning failure
Green and Red LEDs flash × 2	Successful factory reset
Red LED flash × 1	Motion detected in walk test mode
Green LED flash × 6	Occupancy detected
Red LED flash × 3	Occupancy detected and battery low

Dimensions



Application Notes

- Product is battery operated. Use only the specified battery type (3.6V AA). Misuse of battery may cause risk of fire or damage the device.
- Designed for indoor use only. DO NOT use in applications with high levels of condensation.
- Reliable operation between -5 °C to +45 °C ambient temperature.
- Modifications to the product void the limited warranty.
- You are required to read and understand the Installation Guide and all warnings, cautions and other materials related to installation before commencing installation work.

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Data subject to change

https://www.lighting.philips.com/prof/led-electronics/masterconnect-system/LEDELECTRCONN_CA/category