Flush Mount Occupancy Motion Sensor with SBluetooth 5.0 SIG Mesh 🐲

HBMW30/PRO Low-bay

Product Description

HBMW30/PRO is a Bluetooth Microwave standalone motion sensor which integrated with Hytronik True occupancy detection technology. The Hytronik True occupancy detection technology works to detect human breathing rather than the mirror movements. No matter if the person sit/stand statically or turns their back to the sensor. The sensor accurately recognizes occupancy and keeps the lights on continuously, making it highly suitable for stable and peaceful environments such as offices and hotels, though not recommended for industrial settings. With Bluetooth wireless mesh networking, it makes communication between luminaires much easier without time-consuming hardwiring, which eventually saves costs for projects (especially for retrofit upgrade projects!). Meanwhile, simple device setup and commissioning can be done via **Kanimesh***app.



HYTRONIK

CE HE RED 💩 IP20

App Features

- Adjustable motion & static sensitivity
- \mathcal{K} Quick setup mode & advanced setup mode
- Floorplan feature to simplify project planning
 - Web app/platform for dedicated project management
- Koolmesh Pro iPad version for on-site configuration
- Grouping luminaires via mesh network
- Scenes
- **Getailed** motion sensor settings
- Dusk/Dawn photocell (Twilight function)
- Push switch configuration
- Schedule to run scenes based on time and date
- Astro timer (sunrise and sunset)
- Staircase function (primary & secondary)
- Internet-of-Things (IoT) featured
- Device firmware update over-the-air (OTA)
- Device social relations check
- E Bulk commissioning (copy and paste settings)
- Dynamic daylight harvest auto-adaptation

- Power-on status (memory against power loss)
- 🔅 Offline commissioning
- P Different permission levels via authority management
- Network sharing via QR code or keycode
- G€ Remote control via gateway support HBGW01
- (b) Interoperability with Hytronik Bluetooth product portfolio
- Compatible with EnOcean BLE switches
- Continuous development in progress...

Hardware Features

- Black & White & Gray metal surface mount box options
- User-friendly design for installation
- 5) 5 Year warranty



Technical Specifications

Bluetooth Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical indoor)	10~30m
Protocol	Bluetooth 5.0 SIG Mesh

Sensor Data	
Sensor Model	Occupancy Motion detection
Detection range (Max.)*	Installation Height : 3m Diameter(Ø) : 10m
Detection angle	360°

* For more details of detection range, please refer to "detection pattern" section.

Input & Output Characteristics	
Operating voltage	220~240VAC 50/60Hz
Stand-by power	0.3W
Warming-up	20s

Ta: -20°C ~ +50°C
-40°C ~ +70°C
IP20
10 ~ 90%

5015, EN61000-3-2/-3-3, EN61547
0669-1, EN60669-2-1
00 400, EN300 328, EN301479-1/-3/-17
RCM, UKCA

Mechanical Structure









Wire Preparation



Pluggable screw terminal. It is recommended to make connections to the terminal before fitting to the sensor.

Wiring Diagram



Sensor Installation and Commissioning Guidelines

A. Installation Preparation

- 1. Make sure the room is empty with no moving people or machinery when first powered up for 1 minute.
- 2. There is a 20-second warm-up time for the sensor. Please do the commissioning after warm-up.
- 3. When the sensor is powered off, repeat the initial steps once it's re-powered

B. Sensor Placement

- 1. The distance between sensors should be at least 3 meters.
- 2. Sensors should not directly face sources of microwave interference, such as other microwave sensors, microwave ovens, or wireless routers. Maintain a distance of at least 3 meters.

3. The installation environment should avoid object vibrations, strong airflows, curtain movements, water flow in pipes, window glass vibrations, and wind-induced movements of metal roofs. Aim for a stable environment with minimal variables.

4. The sensor is highly sensitive and suitable for stable and quiet environments like offices and hotels, but not for industrial settings.

C. Sensor Operation

1. Movements within 0.3 meters of the sensor, such as waving an arm, might not trigger the sensor, as it will identify and filter out such large movements.

- 2. In test mode, a red LED will flash when the sensor is triggered. There are no visual indications in normal mode.
- 3. If the sensor is too sensitive, use the HRC-12 remote controller to lower the sensitivity.
- 4. Avoid accidentally entering semi-auto mode.
- 5. Pay attention to the daylight sensor threshold value, which needs to be adjusted according to the installation environment.

Subject to change without notice.

Placement Guide and Typical Range



The smart device with the App installed will have a typical range of 10m, but varies from device to device. During commissioning, the installer will need to be in range of the devices when searching for devices to add to the network.

Once the devices have been added to the network via the App, the devices will start communicating within the wireless mesh. This means that once the network is complete, all devices are accessible from the smart device when in a 20m range of a single point.

Detection Pattern



*When it's in breathing & true Occupancy detection mode and in sitting situation, facing to sensor directly will have a better detection range than 90 degrees side facing to sensor.

Optional Accessory - Ceiling/Surface Metal Mount Box: HA09/W, HA09/B, HA09/G









Big and small silicon gasket used to make IP54 degree protection (mounted into HAO9 housing for ceiling mount)

Small silicon water-proof gasket dimension(size:mm)

Big silicon water-proof gasket dimension(size:mm)



Subject to change without notice.

Optional Accessory --- HA08



*Note: Optional Accessory HA09 & HA08 can not be uesd together.

Additional Information / Documents

- To learn more about detailed product features/funcvtions, please refer to www.hytronik.com/download ->knowledge ->Introduction of App Scenes and Product Functions
- 2. Regarding precautions for Bluetooth product installation and operation, please kindly refer to www.hytronik.com/download ->knowledge ->Bluetooth Products - Precautions for Product Installation and Operation
- 3. Data sheet is subject to change without notice. Please always refer to the most recent release on www.hytronik.com/products/bluetooth technology ->Bluetooth Sensors
- 4. Regarding precautions for HF sensor installation and operation, please kindly refer to www.hytronik.com/download ->knowledge ->Microwave Sensors - Precautions for Product Installation and Operation
- 5. Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy