

IP65 HF Motion Sensor with Bluetooth® 5.0 SIG Mesh

HMW98 (High Bay)

Tri-level control & Daylight harvest & 1-10V Dimmable

HYTRONIK®

Bluetooth® CE EMC RED CB IP65 UK

Product Description

HMW98 is a Bluetooth 1-10V high-bay HF motion sensor, with capability of up to 15m installation height. It is designed with robust IP65 structure, and offers 3 different installation methods. With Bluetooth wireless mesh networking, it makes communication much easier without any hardwiring, which eventually adds values to luminaires and saves costs for projects. Meanwhile, simple device setup and commissioning can be done via **Koolmesh™** app.



App Features

- Quick setup mode & advanced setup mode
- Tri-level control
- Daylight harvest
- Circadian rhythm (Human centric lighting)
- 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
- Detailed 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 (master & slave)
- Internet-of-Things (IoT) featured
- Device firmware update over-the-air (OTA)
- Device social relations check
- Bulk commissioning (copy and paste settings)
- Dynamic daylight harvest auto-adaptation
- Power-on status (memory against power loss)
- Offline commissioning
- Different permission levels via authority management
- Network sharing via QR code or keycode
- Remote control via gateway support HBGW01
- Interoperability with Hytronik Bluetooth product portfolio
- Compatible with EnOcean BLE switches
- Continuous development in progress...

Hardware Features

- 1-10V dimming control method
- 3 installation methods
- IP65 design
- High-bay (up to 15m height)
- 5-year warranty



EnOcean
Self-powered IoT



Fully support EnOcean self-powered switch module PTM215B (HBES01/W & HBES01/B)

Technical Data

Input Characteristics

Model No.	HMW98
Mains voltage	220~240VAC 50/60Hz
Stand-by power	<1W
Load ratings:	
Capacitive	800VA
Resistive	1000W
Warming-up	20s

Sensor Data

Model No.	HMW98
Sensor principle	High Frequency (microwave)
Operation frequency	5.8GHz +/- 75MHz
Transmission power	<0.2mW
Detection range	Max installation height: 15m Max detection range: 10m (diameter)
Detection angle	360°

Safety and EMC

EMC standard (EMC)	EN55015, EN61000-3-2/-3-3
Safety standard (LVD)	EN60669-1, EN60669-2-1
Radio Equipment (RED)	EN300440, EN301489-1/-17/-3, EN62479, EN300328
Certification	CB, CE, EMC, RED, RCM

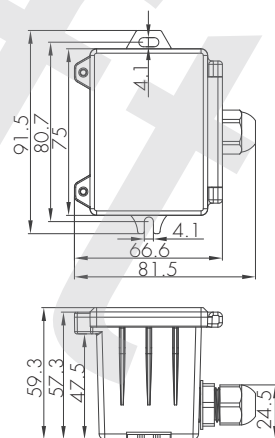
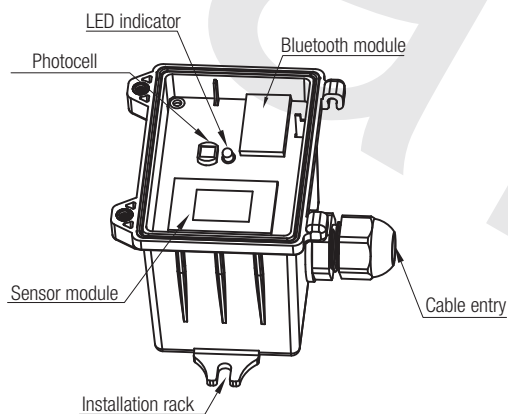
Environment

Operation temperature	Ta: -20°C ~ +70°C
IP rating	IP65

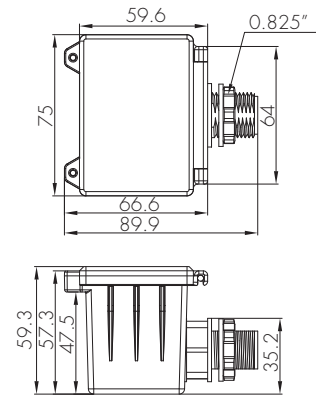
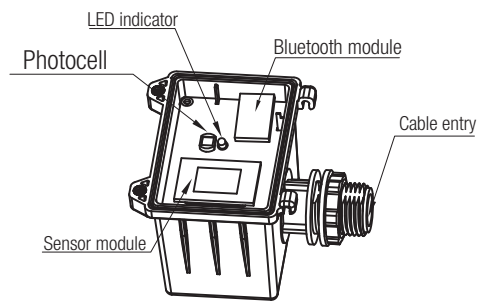
Mechanical Structures and Installations

For more details, please refer to user manual.

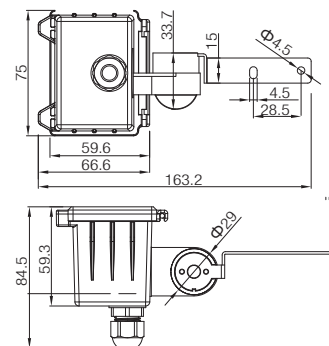
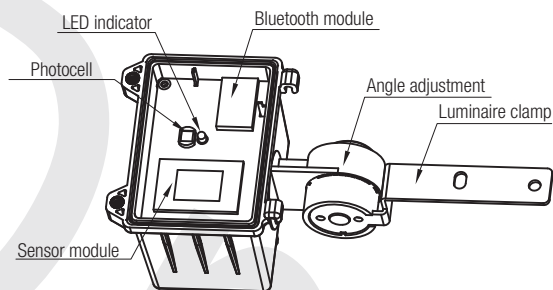
A. Ceiling mount



B. Screw to the Luminaire by conduit

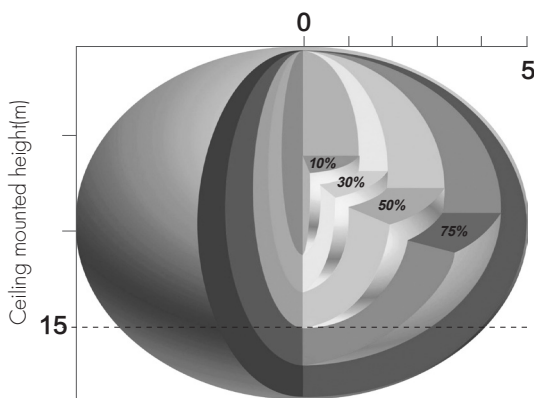


C. Attach to the shade by clamp

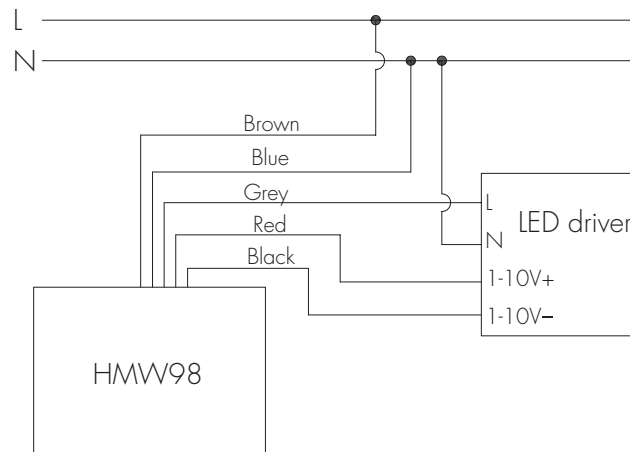


Note: We recommend the mounting distance between sensor to sensor should be more than 2m to prevent sensors from false-triggering.

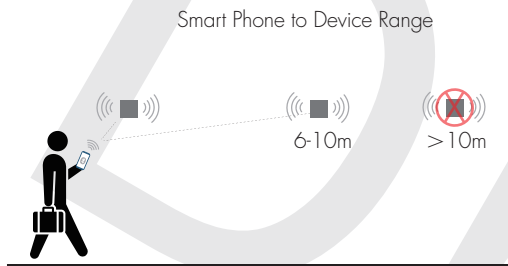
Detection Pattern



Wiring Diagram



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.

Additional Information / Documents

1. To learn more about detailed product features/functions, 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. Regarding precautions for microwave sensor installation and operation, please kindly refer to www.hytronik.com/download->knowledge->Microwave Sensors - Precautions for Product Installation and Operation
4. 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
5. Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download->knowledge->Hytronik Standard Guarantee Policy