

### 1. Technical Specifications

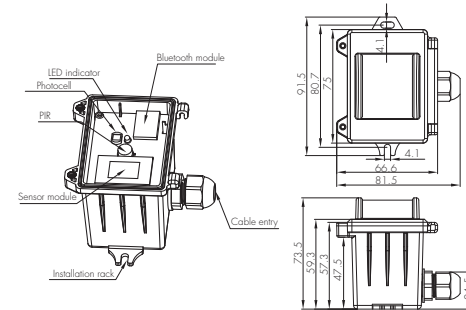
Product type	Tri-level control & Daylight Harvest for Independent DALI
Operating voltage	220-240VAC 50/60Hz
Power supply	I guaranteed:64 mA I max.: 80mA U rated:16VDC
Power consumption	< 1.5 W
Detection angle	360°
Detection area (Max.)*	Max installation height: 15m (forklift)/12m (human) Max detection range: HF: Ø = 24m (forklift)/14m (human) PIR: Ø = 24m (forklift)/20m (human)
Warming up time	20s
Operating temperature	-20°C ~ +50°C
IP rating	IP65
Sensor mode	HF, PIR, HF+PIR, HF / PIR

### 4. Installation

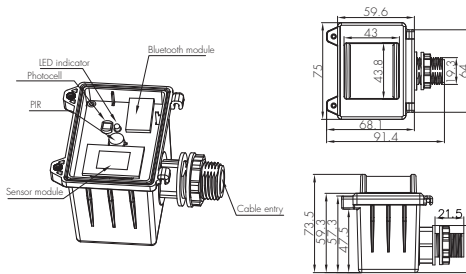
#### ⚠ Warnings:

1. Installation of the sensor involves connecting it to the mains supply. This work must be carried out by a specialist in accordance with electrotechnical regulations.
2. Disconnect power supply before installing.

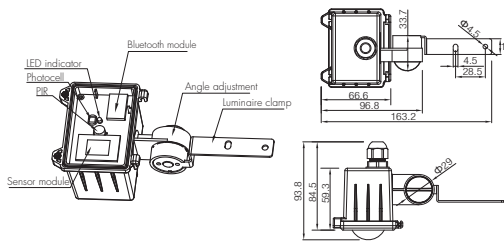
#### A. Ceiling mount



#### B. Screw to the Luminaire by conduit



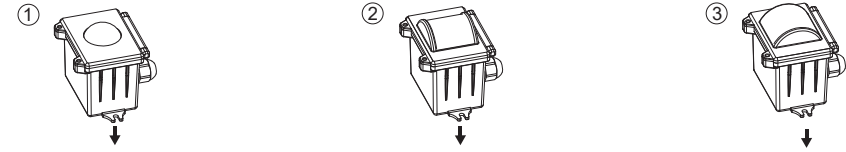
#### C. Attach to the shade by clamp



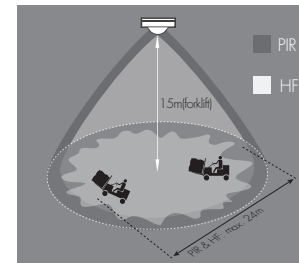
Note: We recommend the mounting distance between sensor to sensor should be more than 2m to prevent sensors from false-triggering.

### 5. Three Options for PIR Lens and Detection Patterns (End user can choose the suitable lens in real application for various requirements)

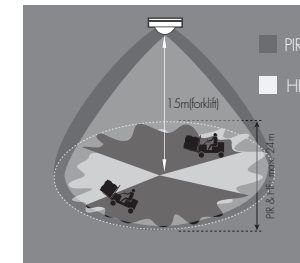
\* For single person walking across, the detection range is reduced by 1/3.



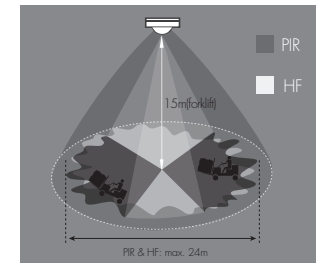
#### Detection pattern for forklift



PIR detection: Ø = 24m (max.)  
HF detection: Ø = 24m (max.)

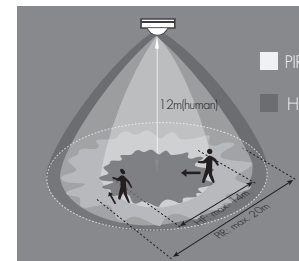


PIR detection: Ø = 24m (max.)  
HF detection: Ø = 24m (max.)

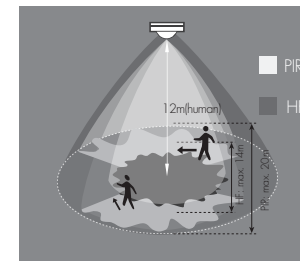


PIR detection: Ø = 24m (max.)  
HF detection: Ø = 24m (max.)

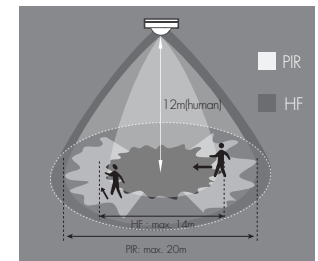
#### Detection pattern for human



HF detection: Ø = 14m (max.)  
PIR detection: Ø = 20m (max.)



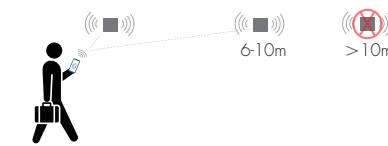
HF detection: Ø = 14m (max.)  
PIR detection: Ø = 20m (max.)



HF detection: Ø = 14m (max.)  
PIR detection: Ø = 20m (max.)

### Placement Guide and Typical Range

Smart Phone to Device 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.

### 2. Download the App

Free App for set-up and commissioning

### Bluetooth 5.0 SIG mesh



Smartphone app for both iOS & Android platform

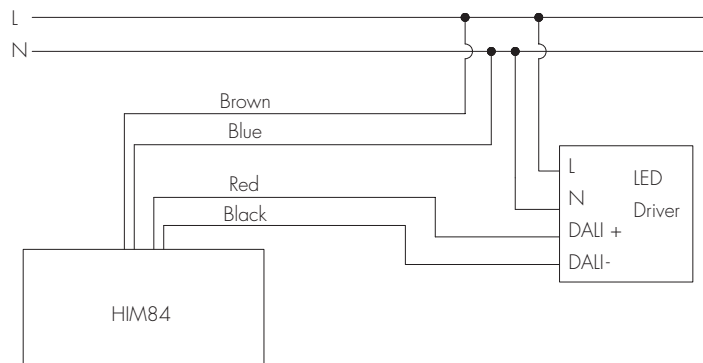


Koolmesh Pro app for iPad



Web app/platform: [www.iot.koolmesh.com](http://www.iot.koolmesh.com)

## 6. Wiring Diagram



1. 200 metres (total) max. for 1 mm<sup>2</sup> CSA (Ta = 50 °C)
2. 300 metres (total) max. for 1.5 mm<sup>2</sup> CSA (Ta = 50 °C)

—This product should be installed by a qualified electrician.

### 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](http://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](http://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](http://www.hytronik.com/download->knowledge->Microwave Sensors - Precautions for Product Installation and Operation)
4. Regarding precautions for PIR sensor installation and operation, please kindly refer to [www.hytronik.com/download->knowledge->PIR Sensors - Precautions for Product Installation and Operation](http://www.hytronik.com/download->knowledge->PIR Sensors - Precautions for Product Installation and Operation)
5. 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](http://www.hytronik.com/products/bluetooth technology->Bluetooth Sensors)
6. Regarding Hytronik standard guarantee policy, please refer to [www.hytronik.com/download->knowledge->Hytronik Standard Guarantee Policy](http://www.hytronik.com/download->knowledge->Hytronik Standard Guarantee Policy)