

DALI PIR Motion Sensor with Bluetooth® 5.0 SIG Mesh

HCD049/BT (High-bay)

DALI/DALI-2 Bolt-on/Batten-fit PIR Sensor

HYTRONIK®



Product Description

HCD049/BT is a Bluetooth DALI/DALI-2 high-bay PIR motion sensor, with capability of up to 1.5m installation height. HCD049/BT has a daylight sensor built-in, and is specifically designed for mounting onto a batten style luminaire. It is also designed for professional lighting manufactures who would like to incorporate wireless control into their luminaires. HCD049/BT is suitable for any typical indoor applications such as office, classroom, car park, warehouse and other commercial/industrial areas. 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

- Floorplan feature to simplify project planning
- Grouping luminaires via mesh network
- Scenes
- Detailed motion sensor settings
- Schedule to run scenes based on time and date
- Astro timer (sunrise and sunset)
- Staircase function (master & slave)
- Device firmware update over-the-air (OTA)
- 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
- Continuous development in progress...

Hardware Features

- 30mA DALI Broadcast output
- IP65
- Fixing washers accessory
- High-bay (up to 1.5m height)
- 5-year warranty, designed for long lifetime up to 50,000 hours

Bluetooth 5.0 SIG mesh

for iOS: iOS 10.0 or later

for Android: Android 5.0 or later

for iPad: Koolmesh Pro for iPad

for iOS:

for Android:

for iPad:

for Web:

Web app/platform: iot.koolmesh.com

Technical Specifications

Input Characteristics

Model No.	HCD049/BT
Operating voltage	220 ~ 240VAC 50/60Hz
Stand-by power	<1W
Output	30mA, 12VDC (max. 15 devices)
Warming-up	30s

Safety and EMC

EMC standard (EMC)	EN55015, EN61547 EN61000-3-2/-3-3
Safety standard (LVD)	EN61347-1, EN61347-2-11
Certification	ENEC, CE, EMC, LVD, RCM
RED	EN300328, EN301489-1 EN301489-17

Sensor Data

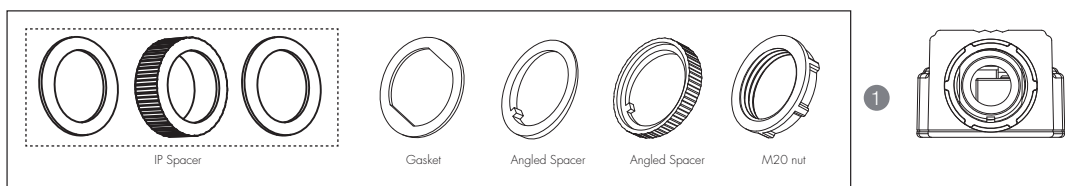
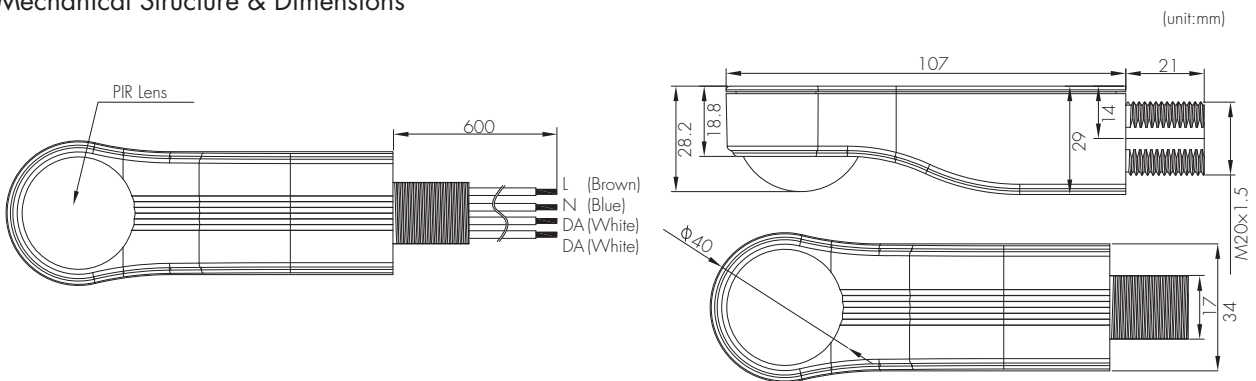
Model No.	HCD049/BT
Sensor principle	PIR detection
Detection range*	Max installation height: 1.5m (forklift) 1.2m (single person) Max detection range: 1.6m (diameter)
Detection angle	360°

* The detection range is heavily influenced by sensor placement (angle) and different walking paces. It may be reduced under certain conditions.

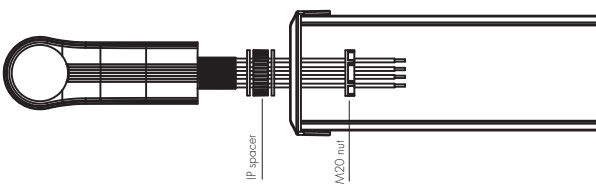
Environment

Operation temperature	Ta: -20°C ~ +50°C
IP rating	IP65

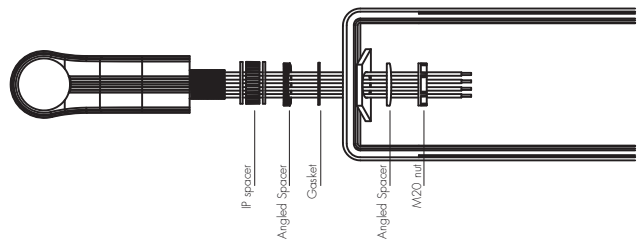
Mechanical Structure & Dimensions



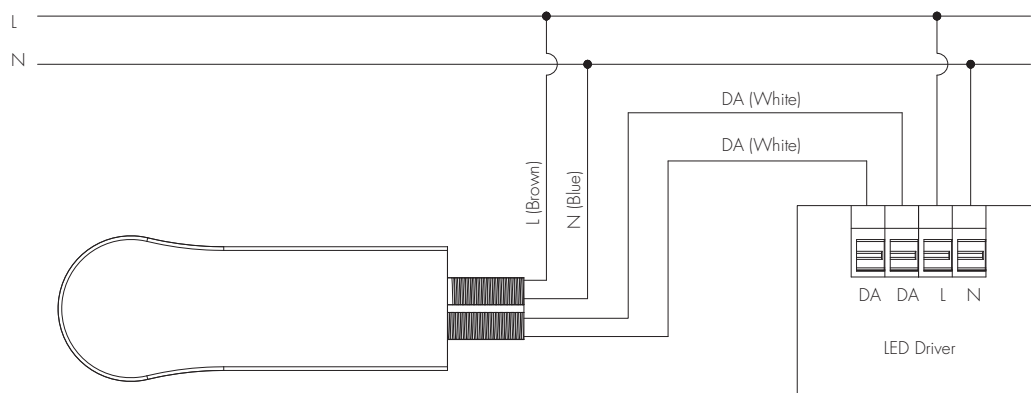
Typical Installation 1



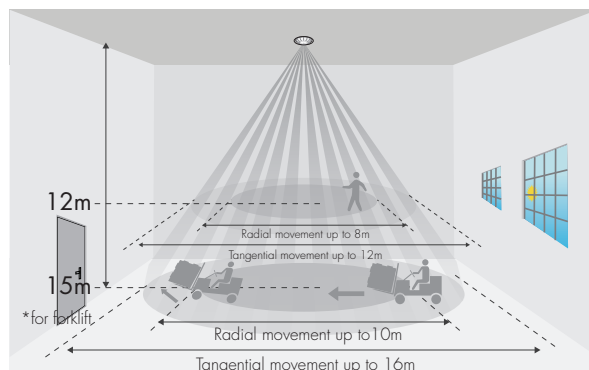
Typical Installation 2



Wiring Diagram



Detection Pattern



*The detection patterns are based upon 5km/h movement speed.

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%20of%20App%20Scenes%20and%20Product%20Functions)
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%20Products%20-%20Precautions%20for%20Product%20Installation%20and%20Operation)
3. 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%20Sensors%20-%20Precautions%20for%20Product%20Installation%20and%20Operation)
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](http://www.hytronik.com/products/bluetooth%20technology->Bluetooth%20Sensors)
5. Regarding Hytronik standard guarantee policy, please refer to [www.hytronik.com/download->knowledge ->Hytronik Standard Guarantee Policy](http://www.hytronik.com/download->knowledge->Hytronik%20Standard%20Guarantee%20Policy)