HIR11/C

PIR Highbay | Ciradian Rhyhm | RJ12 connector to control body

Benefits

Flexible: Plug-and-Play sensor design with side-entry conduit

Versatile: Tri-level dimming + Daylight harvest + Ciradian Rhyhm

Compatible: Compatible with Bluetooth control bases and driversh

Applications

Conduit thread: M 13x1.5mm

School/Classrooms

Office/Commercial Lighting

Check Out the Complete System Solution on the Website:
https://www.hytronik.com/product/HIR11-C

Product Description

The HIR011/C is a high-bay PIR sensor head compatible with the Daylight Harvest system. It can work with linear control bases such as the HC038V/BT and HCD038/BT to enable Bluetooth control functions, including tri-level dimming and circadian rhythm adjustment — all through a plug-and-play design that lets you customize lighting without extra accessories. Perfect for warehouses, gyms, and open-plan offices where flexibility matters most.

Functions and Features

See additional details at the end of datasheet

Daylight Harvest

RJ12 Connection

Tri-level Dimming

Specifications

Main Capabilities	
Connector Type	RJ12

Sensor Data	
Detection angle	360°
Max. Detection range (Diameter)	24.0 m
Maximum Mounting Height	15.0 m
Detection area	452 m^2
Detection Methods	Passive Infrared (PIR)

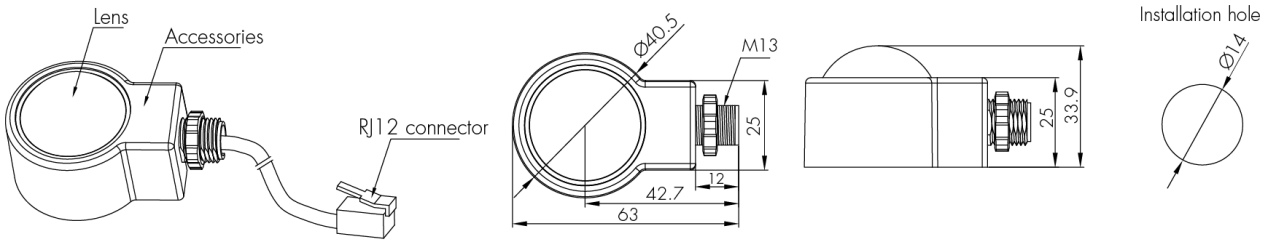
Electrical Data	
Operating voltage range	5 VDC

Specifications

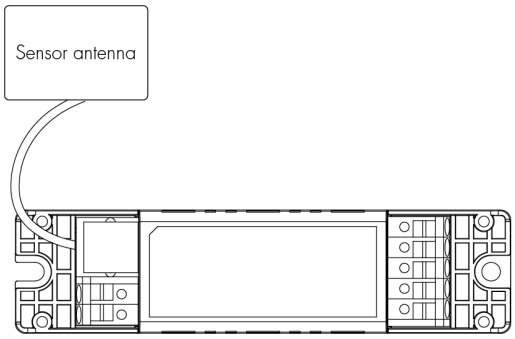
Technical	
Product weight	38.0 g
Product height	33.9 mm
Product length	63.0 mm
Product width	40.5 mm
Mounting hole	14.0 mm
Ambient temperature	-20 ~ +55 °C
Storage temperature	-40 ~ +70 °C
Humidity max	10 ~ 90%
Case Temp.max	75.0 °C
IP Rate	IP20

Standard	
EMC	EN 55015, EN 61000, EN 61547
LVD	AS/NZS 60669-1/-2-1, EN60669-1/-2-1

Technical Drawing



Wiring Diagram

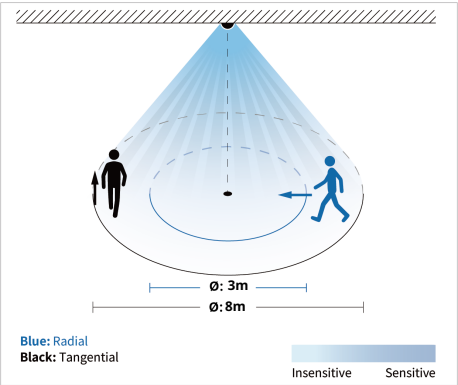


Detection Range

Single Person Walk (Ceiling mount)

The data below is tested under following conditions:
- Single person walking
- Sensor not connected to any driver that may have soft-on period
- Testing temperature Ta = 20°C
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

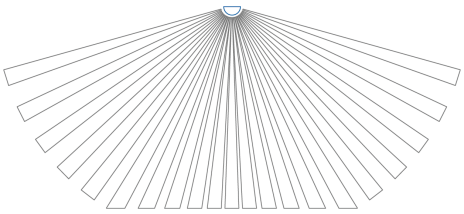
Detection example 2.5m mounting height:



Tangential movement						
H[m]	2.5	6	8	10	11	12
Ø[m]	8	11.5	14	17	18.5	20

Radial movement						
H[m]	2.5	6	8	10	11	12
Ø[m]	3	3	3	3	3	3

Detection schematic diagram

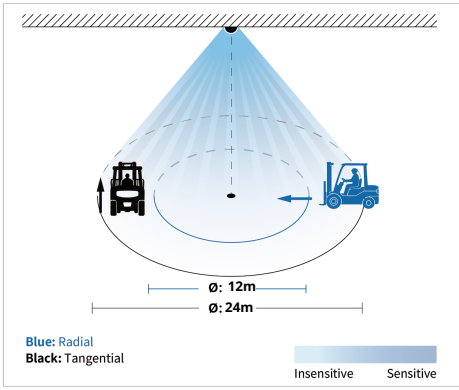


Detection Range

Forklift (Ceiling mount)

The data is tested under following conditions:
• Forklift driving at a speed of 5km/h
• Sensor not connected to any driver that may have soft-on period
• Testing temperature Ta = 20°C
• The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

Detection example 15m mounting height:



Tangential movement						
H[m]	10	11	12	13	14	15
Ø[m]	22	24	24	24	24	24

Radial movement						
H[m]	10	11	12	13	14	15
Ø[m]	16	16	16	15	13	12

Commissioning Instructions and Precautions

A. Installation Notes

1. This product should be installed by a qualifed electrician.

B. Function Notes

1. This sensor head is non-Bluetooth. Wireless control can only be achieved when connected to a Bluetooth-enabled body and a Bluetooth driver.

2. Tri-level dimming and daylight harvesting functions depend on the capabilities of the connected sensor body and driver. Please ensure that both the body and driver support these features. On/off products do not provide these functions.

Warning: For additional important documents, including installation precautions, product guidelines, and guarantee conditions, please refer to the official downloads.

https://hytronik.com/service/downloads

Options

Compatible products (for full functionality)

HBEM01

Integrated Mains & Emergency Control | Max. (Main 25W / EM 3W) | Attachable sensor heads
www.hytronik.com/product/HBEM01

HBEM02

Emergency Inverter Max.4W | Bluetooth | Attachable sensor heads
www.hytronik.com/product/HBEM02

HBEM03

Mains & EM Control | Max. EM 4W output | Attachable sensor heads
www.hytronik.com/product/HBEM03

HBEM038

DALI/Bluetooth Converter | 30mA DALI Broadcast Output | Attachable sensor heads
www.hytronik.com/product/HBEM038

HBEM04

Emergency Inverter Max.5W | DALI Dimmable | Attachable sensor heads
www.hytronik.com/product/HBEM04

HBEM05

Emergency Inverter Max.12W | DALI Dimmable | Attachable sensor heads
www.hytronik.com/product/HBEM05

HBEM06

Emergency Sign Maintained Max.4w | Constant Current | Attachable sensor heads
www.hytronik.com/product/HBEM06

HC038V/BT

Control body | Bluetooth with 0/1-10V | Attachable sensor heads
www.hytronik.com/product/HC038V-BT

HC438V/BT

Control body | Bluetooth & 0/1-10V | Attachable sensor heads | US Certified
www.hytronik.com/product/HC438V-BT

HCD038/BT

Bluetooth DALI Control unit | Built-in PSU | Attachable sensor heads
www.hytronik.com/product/HCD038-BT

HCD438/BT

Control body | Bluetooth & DALI | Attachable sensor heads | US Certified
www.hytronik.com/product/HCD438-BT

HED1025/BT

Bluetooth LED Driver 25W (CC) | Dimmable | Built-in version
www.hytronik.com/product/HED1025-BT

HED6040/BT

Bluetooth LED Driver 40W (CC) Dimmable | Plug'n'Play | Built-in
www.hytronik.com/product/HED6040-BT

HED6045/BT

Bluetooth LED Driver 45W (CC) Dimmable | Plug&Play | Built-in/Stand-alone
www.hytronik.com/product/HED6045-BT

HED6060/BT

Bluetooth LED Driver 60W (CC) Dimmable | Plug'n'Play | Built-in
www.hytronik.com/product/HED6060-BT

HED7030/BT

Bluetooth LED Driver 30W (CC) Dimmable | Plug'n'Play | Built-in version
www.hytronik.com/product/HED7030-BT

HED8040/BT

Bluetooth LED Driver 40W (CC) Tunable white | Plug'n'Play | Built-in
www.hytronik.com/product/HED8040-BT

HED8045/BT

Bluetooth LED Driver 45W (CC) Tunable white | Plug'n'Play | Built-in/Stand alone
www.hytronik.com/product/HED8045-BT

Options

Compatible products (for full functionality)

HED8045/BT

Bluetooth LED Driver 45W (CC) Tunable white | Plug'n'Play | Built-in/Stand alone
www.hytronik.com/product/HED8045-BT

HED8060/BT

Bluetooth LED Driver 60W (CC) | Tunable white | Built-in
www.hytronik.com/product/HED8060-BT

HED8080/BT

Bluetooth LED Driver 80W (CC) | Tunable white | Built-in
www.hytronik.com/product/HED8080-BT

Functions and Features

Daylight Harvest

Right time, right place and the right amount of light! Daylight harvest (Also known as daylight regulating or daylight interaction) is a must in the future lighting norms. It automatically measures available natural light and adjusts artificial lighting output to maintain the target illuminance level. Using daylight sensor feedback, control signals are transmitted to the LED drivers via DALI or 0–10V interfaces, ensuring the required light output is delivered only when needed, improving visual comfort and reducing energy consumption.

RJ12 Sensor Connection

The product features an RJ12 plug-and-play connection interface, enabling quick, tool-free installation and easy maintenance. The standardized connector supports flexible integration between drivers, sensor bases and sensor heads, ensuring reliable communication and simplifying replacement or system expansion. This modular connection method enhances installation efficiency and reduces wiring complexity in both new and retrofit applications.

Tri-level Dimming

Hytronik's tri-level dimming products offer 3 levels of light control: 100% dimmed light off, with settable time periods between each phase, as well dimming level and daylight threshold.
*All Hytronik's tri-level dimming products can also be configured as bi-level control (by setting the stand-by period to infinity), so that the light always remains in the dimmed mode in absence for areas where there are safety, security or enhanced comfort requirements.

Check out for further explanation of features

https://hytronik.com/solutions/lighting-control-features