













Benefits

Adaptable: Lens variants for different detection ranges

Autonomous: On/off occupancy control for up to 800W

User-Friendly: With one-key commissioning with IR controller

Applications

Remote ceiling or surface mounting (with accessory)

Offices

Classrooms

Check out the complete system solution on the website: https://www.hytronik.com/product/HIR28

Product description

It is a low-profile sensor designed for aesthetically demanding architectural projects. It offers high-quality, simple On/Off occupancy control or semi-automaticabsence detection. An intelligent photocell prevents light switching when natural daylight is available. Setup is easy with a remote control handset, allowing one-key commissioning for multiple devices.

Hardware Features

See additional details at the end of datasheet









ON/OFF Control





Semi-auto Mode

Functions and Features

See additional details at the end of datasheet





Specifications

Main Capabilities	
Dimming (Output) Interface	Relay On/Off
Connector Type	Standard 2 cables
Stand-by power	< 0.3 W

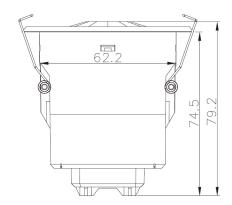
Sensor Data	
Detection angle	360°
Max. Detection range (DxH)	9 m
Maximum Mounting Height	6 m
Detection area	64 m²

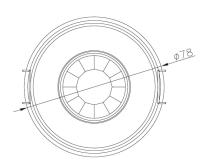
Electrical Data	
Warming-up	20 s
Operating Voltage	220-240 VAC 50/60 Hz
Max withstandable in-rush current	120A@160µs
Load capacitive	400.0 VA
Load resistive	800.0 Watt

Technical	
Product weight	125.0 g
Product height	79.2 mm
Product width	78.0 mm
Mounting hole	66.0 mm
Ambient temperature	-20 ~ +50 °C
Humidity max	10 ~ 90%
IP Rate	IP20
IP Rate (facial part)	IP54

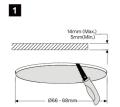


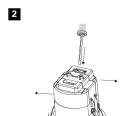
Technical Drawing

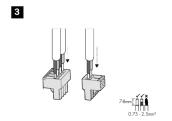


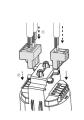


Installation Steps



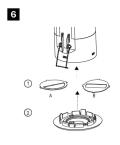


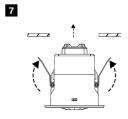


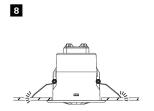


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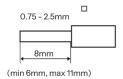






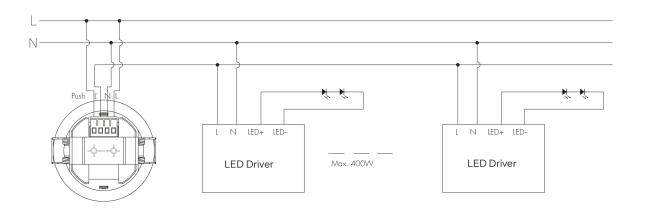
Wire Preparation





Steckbare Schraubklemme. Es wird empfohlen, die Verbindungen zur Klemme herzustellen, bevor diese am Sensor montiert wird.

Wiring Diagram



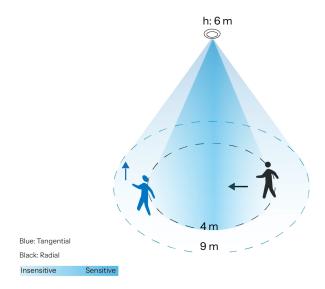
- A. This product should be installed by a qualifed electrician.
- B. The device retains its last operational state after a power interruption, ensuring that all settings remain unchanged when power is restored.
- C. The device stores the last command applied, regardless of the input method, with the most recent setting overriding any previous ones and being saved in the MCU memory. For example, if the hold-time is set to 5s via dip-switch, then changed to 10s with the remote controller, the 10S setting will be stored in memory.



Detection Range

Person

Mounting Height: 2.5 m - 6 m



Tangential					
H[m]	2.5	3	4	5	6
Ø[m]	8	9	7	7	7

Radial					
H[m]	2.5	3	4	5	6
Ø[m]	4	4	4	4	4

The data below is tested under following conditions:

- · Single person walking
- Sensor not connected to any driver that may have soft-on period
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.



Options

Included Accessories



Deep-reaching rear covers HA08 and HA08/S

Allows cables to exit upward or sideways.



Blind Insert Option 1 and Option 2

Blind insert for blocking certain detection angles.

Compatible Products



Metal Mount Box | Surface Mounting | Gray Color

HA09/G

www.hytronik.com/product/HA09-G



Metal Mount Box | Surface Mounting | Black Color

HA09/B

www.hytronik.com/product/HA09-B



 ${\sf Metal\ Mount\ Box\ |\ Surface\ Mounting\ |\ White\ Color}$

HA09/W

www.hytronik.com/product/HA09-W



Functions and Features



5-year warranty

All Hytronik products are supplied with a 5-year warranty against defect in design or manufacture. The warranty applies to all electronic control gears supplied by Hytronik and is applicable to the party to which the sale was made. The warranty is not transferable to a 3rd party and compatibility with external components are the responsibility of the finished goods manufacturer. With today's multi-national sourcing strategies, we offer an unrivalled universal warranty with support available in regions where Hytronik has its own of ce or authorized representation, regardless of where the Hytronik product was purchased. Furthermore, we operate a 24-hour response policy to any claim. The full warranty policy is available upon request or from our website.



Intelligent Photocell

The built-in photocell will also automatically turn off the light when the ambient natural light exceeds the programmed lux level for more than 5min, regardless of whether motion is detected or not.



Manual Override

With the help of push-switch, this sensor can be over-ridden by the end-user to manually switch on/off the light, which makes the product more user-friendly and offers more options to fit some extra-ordinary demands:



ON/OFF Control

This sensor is a motion switch, which turns on the light upon detection of motion, and turns off after a pre-selected hold-time when there is no movement. A daylight sensor is also built in to prevent the light from switching on when there is sufficient natural light.



One_key commissioning

It simplifies complex processes with a single click for users to complete the commissioning. Saves time and effort, operates systems or devices smoothly, boosts productivity and user experience.



Semi-auto Mode

Absence detector: motion sensor is employed, but only activated on the manual press of the push-switch, the light keeps being ON in the presence, and switches off in the long absence.



Zero-cross Relay Operation

Designed in the software, sensor switches on/off the load right at the zero-cross point, to ensure that the in-rush current is minimised, enabling the maximum lifetime of the relay.



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. The daylight sensor measures the available surrounding natural light and calculates how much artificial light is needed to reach the target lux level. The control output is passed to the drivers by DALI or 0/1-10V signals which then deliver the needed amount of light.

Check out for further explanation of features

https://www.hytronik.com