

SAM11

HF Lowdbay | Tri-level dimming | RJ12 connector to control body

HYTRONIK[®]
SENSORS & LIGHTING CONTROL



Benefits

Compact: Standard rectangular Plug&Play sensor design

Innovative: Rotary switch for quick RF channel pair

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

Applications

Master luminaire with sensor

Classrooms

Offices

Check Out the Complete System Solution on the Website:
<https://www.hytronik.com/product/SAM11>



Product Description

This sensor features microwave (HF) detection along with tri-level dimming and a robust HF antenna design to mitigate wireless interference. It supports RF pairing (FSK433MHz or FSK868MHz) for primary and secondary control, facilitated by a rotary switch for quick RF channel pairing. It includes a photodiode (PD) and active lux switching capabilities, suitable for installations up to 6m high with a Ø = 12m detection range. Sensor settings are adjustable using the HRC-11 handset.

Functions and Features

See additional details at the end of datasheet



Daylight Harvest



Tri-level Dimming

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Specifications

Main Capabilities

Connector Type	RJ12
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Sensor Data

Max. Detection range (Diameter)	12.0 m
Maximum Mounting Height	6.0 m
Detection area	113 m ²

Electrical Data

Operating voltage range	5 VDC
Warming-up	20 s

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Specifications

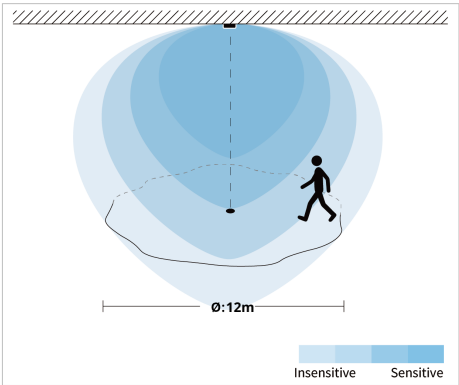
Technical	
Product weight	25.0 g
Product height	16.0 mm
Product length	71.5 mm
Product width	31.7 mm
Mounting hole	4.1 mm
Cable length	30.0 cm
IP Rate	IP20

Detection Range

Single Person Walk (Ceiling mount)

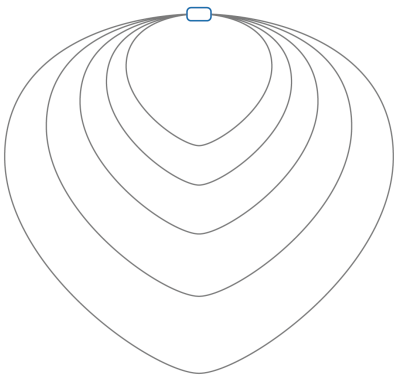
- The data below is tested under following conditions:
- Single person walking
 - Sensor not connected to any driver that may have soft-on period
 - Testing temperature Ta = 20°C

Detection example 6m mounting height:



Sensitivity	
H[m]	100%
	Ø[m]
6	12

Detection schematic diagram



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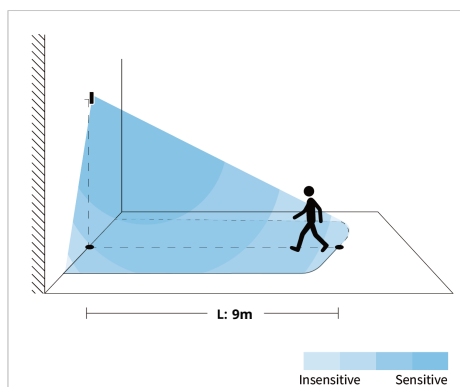
Detection Range

Single Person Walk (Wall 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 $T_a = 20^\circ\text{C}$

Detection example 4m mounting height:



Sensitivity	
H[m]	100%
	Ø[m]
4	9

Commissioning Instructions and Precautions

A. Installation Notes

1. This product should be installed by a qualified electrician.
2. The RF sensor antenna has 15 channels for fast grouping. Just set all devices to the same channel, and grouping will finish automatically.

Note: Channel 0 does not support fast grouping; sensors on it can only be grouped by remote control.

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

<https://hytronik.com/service/downloads>

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Options

Compatible products (for full functionality)



HC038V

Control unit | 1-10V | Attachable sensor heads
www.hytronik.com/product/HC038V



HRC-11

Sensor remote controller | Diverse function | White color
www.hytronik.com/product/HRC-11



HCD038

Control unit | DALI with PSU | Attachable sensor heads
www.hytronik.com/product/HCD038

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.



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>