

SUPER COMPACT ON/OFF HF SENSOR HC005S/I

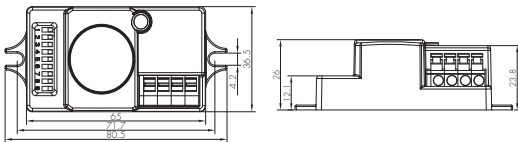
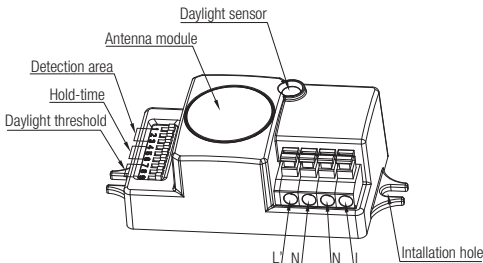
Installation and Instruction Manual

1. Technical Specifications

Product Type:	ON/OFF Control Microwave Motion Sensor Against wireless signals interference
Operating Voltage:	220-240VAC 50/60Hz
HF System:	5.8GHz CW radar
Transmission Power:	< 0.2mW
Rated Load:	800W (resistive load) 400VA (capacitive load)
Detection Angle:	30~150°
Power Consumption:	< 0.5W
Detection Range :	Max. 10 meters in diameter, adjustable
Time Setting:	5s ~ 30 min.
Mounting:	Indoors, Ceiling & walling mounted
Light Control:	2~50 lux, disable
Working Temperature:	-35 ~ +70°C*

*For usage in -35°C ~ -20°C environment, please refer to www.hytronik.com/download ->knowledge ->Microwave Sensors - Precautions for Product Installation and Operation point 4) for more information.

2. Dimensions (mm)



3. Functions

1. Lux Off Function

The built-in daylight sensor can measure ambient natural light and switch off the fixture automatically whenever artificial light is not required (natural light lux level exceeds daylight threshold).

2. Zero-cross Relay Operation

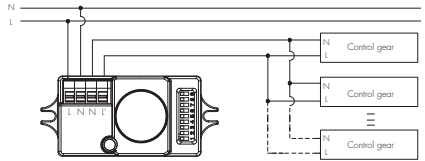
Designed in the software, the sensor switches on/off the load right at the zero-cross point, to ensure the in-rush current is minimised, enabling the maximum life-time of the relay.

3. Loop-in and Loop-out Terminal

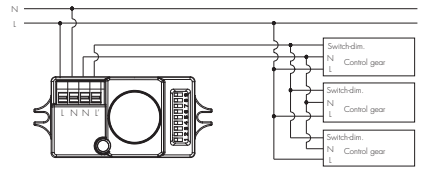
Double L N terminal makes it easy for wire loop-in and loop-out, and saves the cost of terminal block and assembly time.

4. Wiring Diagram

To connect several standard control gear with 1 sensor (ON/OFF function), the wiring should be.



With Tridonic switchDIM ballast / driver (Excel ballast/driver, corridor function), this sensor can also achieve tri-level dimming control:



5. Settings

Detection Range

This determines the effective range of the motion detector and is set by DIP switches at the sensor itself, refer to figure. Note that reducing the sensitivity will also narrow the detection range. The following settings are available.

- I - 100%
- II - 75%
- III - 50%
- IV - 30%
- V - Sensor OFF

Detection Area		
I	II	III
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Hold Time

Select the dip switch configuration for the full brightness on-time after presence detection. Please note that this function is disabled when the natural daylight exceeds the daylight threshold setting more than 5 minutes.

- I - Walk test mode 5s
- II - 30s
- III - 1 minute
- IV - 5 minutes
- V - 20 minutes
- VI - 30 minutes

Hold Time		
I	II	III
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Daylight Sensor

This setting holds off the 100% light output should there sufficient daylight and is set using DIP switches at the sensor, refer to figure. The following settings are available.

- I - Disable
- II - 50 lux
- III - 20 lux
- IV - 5 lux
- V - 2 lux

Daylight Sensor		
I	II	III
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



* In disable mode the fixture(s) will always be on with motion detection regardless of the ambient lux level.

6. Troubleshooting

MALFUNCTION CAUSE REMEDY	CAUSE	REMEDY
The fixture does not light up	Incorrect daylight threshold setting	Adjust daylight threshold setting
	Faulty fixture	Replace fixture
	No power supply	Check power to sensor
	Detection zone not targeted	Check detection area setting
The fixture is always on	Continuous movement in the detection zone	Check detection area setting
The fixture is on when it should not	Sudden change in temperature due to weather (wind, rain, snow) or air expelled from fans, or open windows	Adjust zone, change installation site