Manuals+ — User Manuals Simplified.

HYTRONIK HC005S Super Compact On-Off HF Sensor Instruction Manual
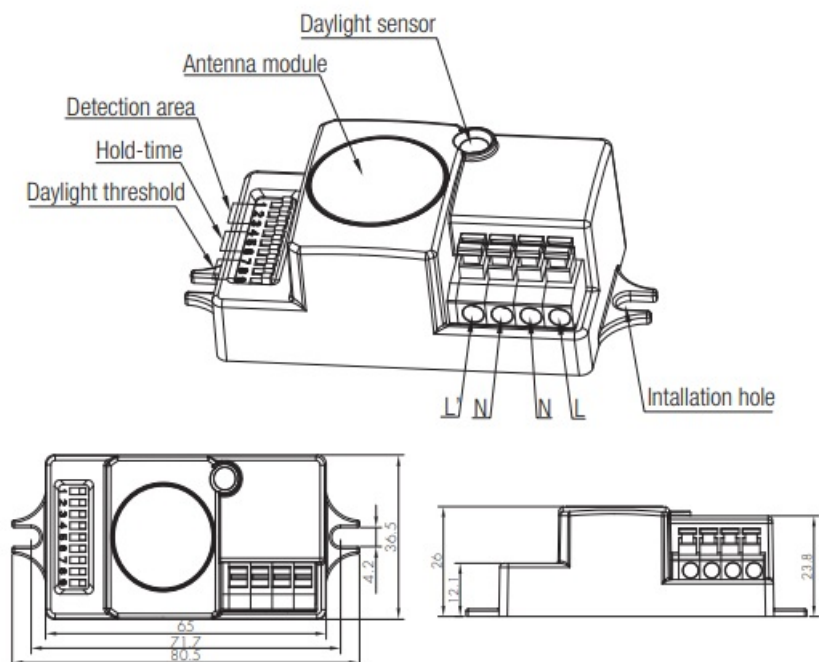
Contents

HYTRONIK HC005S Super Compact On-Off HF Sensor

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:	-20 ~ +70°C

Dimensions (mm)

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).
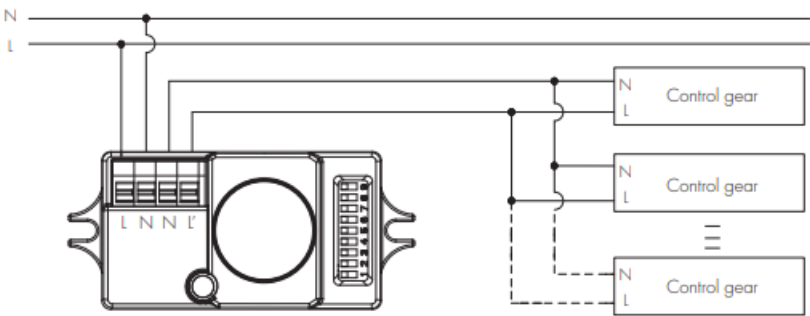
2. **Zero-cross Relay Operation**

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.
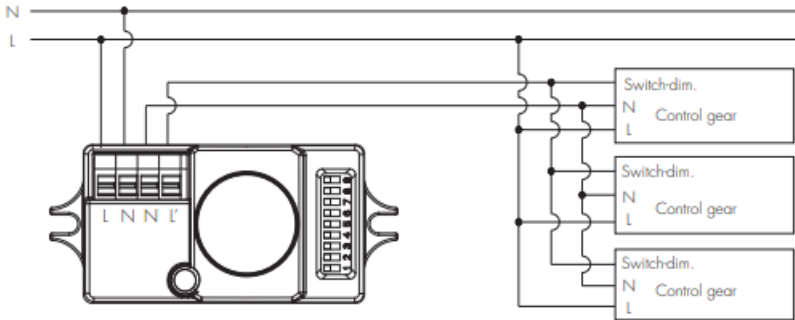
3. **Loop-in and Loop-out Terminal**

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

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:

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

	1	2	3	
I	●	●	●	100%
II	○	●	●	75%
III	○	●	○	50%
IV	○	○	●	30%
V	○	○	○	Sensor OFF

Hold Time
Select the dip switch configuration for the full brightness on-time after presense 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

	4	5	6	
I	●	●	●	5s
II	●	○	●	30s
III	●	○	○	1min
IV	○	●	●	5min
V	○	●	○	10min
VI	○	○	●	20min
VII	○	○	○	30min

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

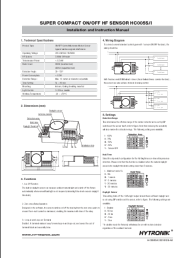|	7	8	9	
I	●	●	●	Disable
II	○	●	●	50Lux
III	○	●	○	20Lux
IV	○	○	●	5 Lux
V	○	○	○	2 Lux

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

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	Continous 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

Documents / Resources

HYTRONIK HC005S Super Compact On-Off HF Sensor [pdf] Instruction Manual
HC005S Super Compact On-Off HF Sensor, HC005S, Super Compact On-Off HF Sensor

References

- **Microwave sensor_Microwave motion sensor_Hytronik Electronics Co., Ltd.**