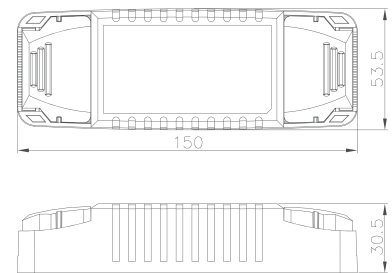


False Ceiling Version On/off Control

Model: HC009S /EXT



100hours
burn-in

Loop in
Loop out

Ambient daylight
threshold

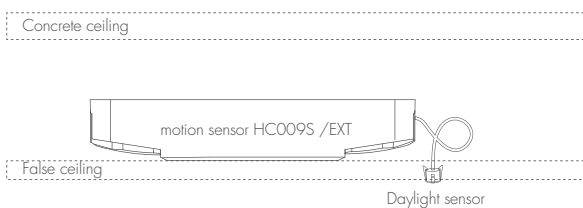
Condominium
control

zero-CROSS
relay operation

Detection Pattern

Hold-time
5s~30min

2~50Lux



In retrofit project, we can completely hide this motion sensor. Only a tiny hole is needed on the false ceiling to fix the daylight sensor.

Thanks to the penetration property of microwave, motion sensor body is hidden behind the false ceiling, with the sensor antenna faces downwards.

Function and Options

1 100H burn-in mode for fluorescent lamp

With simple operation, rapidly turn off/on the fixture 3 cycles within 3 sec. (the green LED on the sensor flashes and the fixture blinks 3 times to indicate the success of setup), lamp will be 100% on for 100 hours, and then automatically goes to sensor mode after 100 hours. This is crucial to secure the lifetime of fluorescent lamp, when new fixture is installed, or old lamp is replaced.

This 100H burn-in feature can be cancelled by turning off/on the fixture 1 cycle within 1sec.

2 Condominium control function

In many cases, several sensors are connected together to control the same fixture, or to trigger on each other, the sudden on/off of the lamp tube or the ballast/driver causes huge magnetic pulse, which may mis-trigger the sensor. This sensor has a very advanced software to ignore that interference.

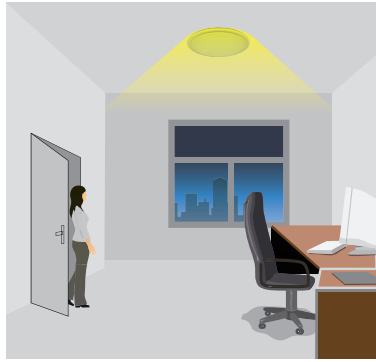
By connecting L' terminal with L' on another sensor, if any of the master fixture (containing sensor) is triggered, all luminaries (including slaves and other master unit in the group) will also light up.

3 On-off Function

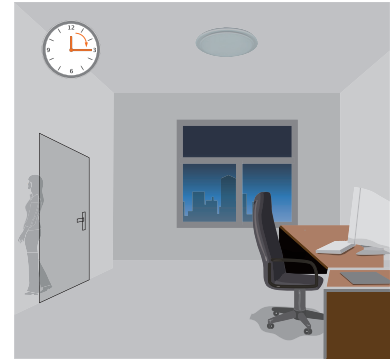
This sensor is a motion switch, which turns on the light on detection of moving objects, and turns off after a pre-selected hold-time when there is no motion detected. A daylight sensor is also built-in to switch off the light when there is sufficient natural light.



With sufficient natural light, the light does not switch on when presence detected.



With insufficient natural light, the sensor switches on the light automatically when person enters the room.



After the hold time, then switches off automatically when no movement is detected.

4 Ambient daylight threshold

With simple operation, rapidly turn off/on the fixture 2 cycles within 2 sec:

1. The green LED on the sensor flashes slowly for 5 seconds, meanwhile the fixture blinks twice.
2. The daylight sensor measures and remembers the surrounding lux for 1 sec.
3. The fixture and green LED will be on for 10s to indicate the success of learning.

This feature enables the fixture to function well in any real application circumstance, where the daylight penetrated into fixture may vary a lot.

The latest surrounding lux value overwrites previous lux value learned.

Both the settings on DIP switch and the learned ambient lux threshold can overwrite each other. The latest action stays in validity.

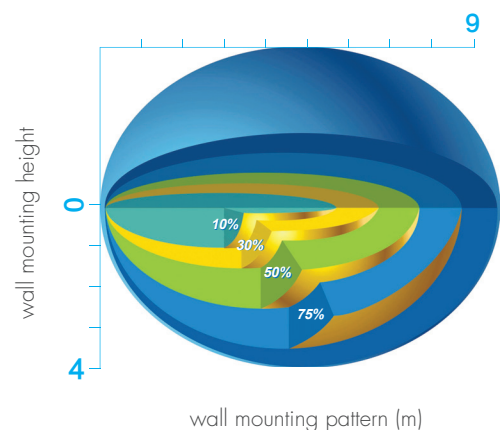
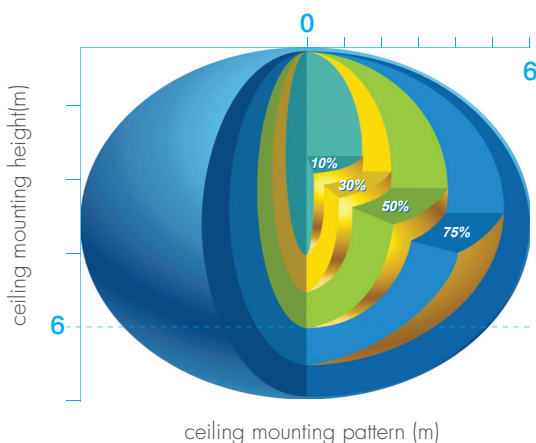
5 Zero-cross relay operation

Designed in the software, the sensor switches on/off the load right on the zero-cross point, to ensure the min. current passing through the relay contact point, and enable the max. load and life-time of the relay.

6 Loop-in and loop-out

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

Detection Pattern



Settings

1 Detection area

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely for each specific application.

	1	2	3	
I	●	●	●	100%
II	○	●	●	75%
III	●	○	●	50%
IV	●	●	○	25%
V	○	○	○	10%



- I – Detection range 100%
- II – Detection range 75%
- III – Detection range 50%
- IV – Detection range 25%
- V – Detection range 10%

2 Hold-time

Hold-time means the time period you would like to keep the lamp on 100% after the person has left the detection area.

	4	5	6	7	
I	●	●	●	●	5s
II	○	●	●	●	30s
III	●	○	●	●	1min
IV	●	●	○	●	5min
V	●	●	●	○	15min
VI	○	○	○	○	30min



- I – 5s
- II – 30s
- III – 1 minute
- IV – 5minutes
- V – 15minutes
- VI – 30minutes

3 Daylight sensor

The daylight threshold can be set on DIP switches, to fit for particular application.

"daylight" : The lamp works always, even during daylight.

"twilight" : The lamp works only in twilight .

"darkness" : The lamp works only in darkness.

	8	9	10	11	12	
I	●	●	●	●	●	2Lux
II	○	●	●	●	●	5Lux
III	●	○	●	●	●	10Lux
IV	●	●	○	●	●	30Lux
V	●	●	●	○	●	50Lux
VI	○	○	○	○	○	Disable



- I – 2 Lux darkness operation only
- II – 5 Lux darkness operation only
- III – 10 Lux twilight operation
- IV – 30 Lux daylight operation
- V – 50 Lux daylight operation
- VI – Photocell disabled

Technical Data

Operating voltage	220-240VAC	
Switched power	Max.400W (capacitive)	Max.1200W(resistive)
Standby power	<0.5W	
Warming-up time	20s	
Detection area	10/25/50/75/100%, can be customized	
Hold time	5s/30s/1min/5min/15min/30min, can be customized	
Daylight threshold	2~50Lux daylight/twilight/darkness, can be customized	
Microwave frequency	5.8GHz+/-75MHz	
Microwave power	<0.2mW	
Detection range	Max. (øxH): 12m x 3m	
Detection angle	30°~150°	
Mounting height	Max.3m	
Operating temperature	-20°C ~ +60°C	
IP rating	IP20 IP65(mounting in Hytronik special box)	
certificate	Semko, EMC, CE, R&TTE, SAA	