IP65 High Bay HF Motion Sensor

HMW35

Tri-level Control for Independent DALI

HYTRONIK[®]

Technical Data

Input Characteristics

Model No.	HMW35		
Mains voltage	120~277VAC 50/60Hz		
Stand-by power	<1W		
Switched power	Max. 20pcs devices, 40mA		
Warming-up	20s		

Sensor Data

Model No.	HMW35		
Sensor principle	High Frequency (microwave)		
Operation frequency	5.8GHz +/- 75MHz		
Transmission power	<0.2mW		
Detection range	Max. (ØxH) 10m x 15m		
Detection angle	360°		

Safety and EMC

EMC standard (EMC)	EN55015, EN61000
Safety standard (LVD)	EN60669-1, EN60669-2-1
Radio Equipment (RED)	EN300440, EN301489-1, EN62479
Certification	Semko, CB, CE , EMC, RED, SAA

Environment Operation temperature Ta: -20°C ~ +70°C IP rating IP65

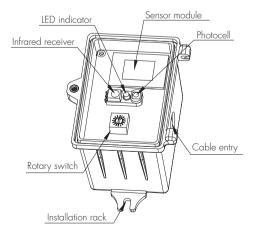
CE emc RED SAA CB IP65

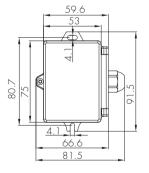
Mechanical Structures and Installations

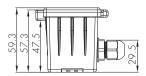
For more details, please refer to user manual.

A. Ceiling mount

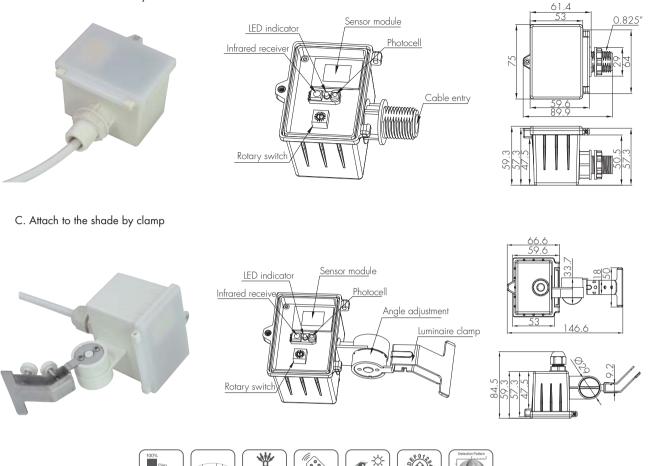








B. Screw to the Luminaire by conduit





Functions and Features

1 Intelligent Photocell (daylight detection prior to motion detection)

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. This feature can be disabled if it is required that the fixture stays at dimmed level during absence.



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



With insufficient natural light, the sensor switches on the light automatically when presence is detected.



The sensor switches off the light when natural light is sufficient, even with presence.

Note: if the stand-by time is preset at "+~", the fixture never switches off but stays at preset dimming level even when natural light is sufficient.

7 Tri-level Control (Corridor Function)

Hytronik builds this function inside the motion sensor to achieve tri-level control, for some areas which require a light change notice before switch-off. The sensor offers 3 levels of light: 100%-->dimmed light (natural light is insufficient) ->off; and 2 periods of selectable waiting time: motion hold-time and stand-by period; Selectable daylight threshold and freedom of detection area.

Settings (Remote Control HRC-11)



Permanent ON/OFF function

Press button "ON/OFF" to select permanent ON or permanent OFF mode. * Press button "AUTO", "RESET" to quit this mode



Reset Settings

Press button "RESET", all settings go back to rotary switch settings.



Shift Button

Press button "Shift", the LED on the top left corner will flash to indicate mode selection. All values / settings in RED are valid for 20 seconds.



AUTO mode

Press button "AUTO" to initiate automatic mode. The sensor starts working and all settings remain as before the light is switched ON/OFF. Note: "Semi-auto" function is disabled.



Power output

Press the buttons to select light output at 80% (at initial 10,000 hours) or 100%. Note: "Sensor off" and "Twilight" functions are disabled.



Brightness +/-

Press the buttons to adjust the light brightness during hold-time.

Start (Memory) (Apply Scene program - 1-key commissioning

1. Press button "Start" to program.

2. Select the buttons in "Detection range", "Daylight threshold", "Hold-time", "Stand-by time", "Stand-by dimming le vel" to set all parameters.

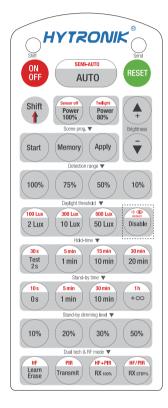
3. Press button "Memory" to save all the settings programmed in the remote control.

4. Press button "Apply" to set the settings to each sensor unit(s).

For example, to set detection range 100%, daylight threshold Disable, hold-time 5min, stand-by time +∞, stand-by dimming level 30%, the steps should be: Press button "Start", button "100%", "Disable", "Shift", "5min", "Shift", "+~", "30%", "Memory". By pointing to the sensor unit(s) and pressing "Apply", all settings are passed on the sensor(s).

Detection range

Press buttons in zone "Detection range" to set detection range at 100% / 75% / 50% / 10%.



HRC-11

Load Indication: The light will flash ONCE rapidly after receiving the command from the remote control successfully.

Daylight threshold

Press buttons in zone " Daylight threshold" to set daylight sensor at 2Lux/ 10Lux / 50Lux / 100Lux / 300Lux / 500Lux / Disable. Note: To set daylight sensor at 100Lux / 300Lux / 500Lux, press "Shift" button first.

Ambient daylight threshold

1. Press button "Shift", the red LED starts to flash.

2. Press button "Ambient", the surrounding lux level is sampled and set as the new daylight threshold.

Hold-time

Press buttons in zone "hold-time" to set the hold-time at 2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min. Note: 1. To set hold-time at 30s / 5min / 15min / 30min, press "Shift" button first.

2. 2s is for testing purpose only, stand-by period and daylight sensor settings are disabled in this mode. *To exit from Test mode, press button "RESET" or any button in "Hold-time".

Stand-by time (corridor function)

Press buttons in zone "stand-by time" to set the stand-by period at 0s / 10s / 1min / 5min / 10min / 30min / 1h / +∞. Note: "Os" means on/off control; "+~" means bi-level control, the fixture is 100% on when there is motion detected, and remains at the stand-by dimming level when no presence after motion hold-time.

Stand-by dimming level

Press the button in zone "stand-by dimming level" to set the stand-by dimming level at 10% / 20% / 30% / 50%.

Dual tech & RF mode

All buttons are disabled.

Rotary Switch Preset

A rotary switch is built inside the sensor for scene selection / fast programming. Total 16 channels are available:



Note: settings can also be changed by remote control HRC-11. The last action controls.

Channel	Detection range	Hold-time	Daylight sensor	Stand-by time	Stand-by dim level
0	100%	5s	Disable	1 Os	10%
1	100%	lmin	2Lux	5min	10%
2	100%	5min	1 OLux	10min	10%
3	100%	5min	30Lux	30min	10%
4	100%	5min	1 OLux	Os	Disable
5	100%	5min	30Lux	+∞	10%
6	100%	5min	Disable	+∞	30%
7	100%	10min	2Lux	10min	10%
8	100%	10min	1 OLux	30min	10%
9	100%	10min	30Lux	+∞	10%
А	100%	10min	Disable	+∞	30%
В	75%	10min	30Lux	+∞	10%
С	50%	10min	1 OLux	+∞	10%
D	100%	30min	50Lux	+∞	10%
E	100%	30min	Disable	+∞	30%
F	100%	5s	2Lux	10s	10%

