

HIGH BAY DUAL SENSE SENSOR HIM30

Installation and Instruction Manual

1. Technical Specifications

Product type	On/Off control dual sense sensor
Operating voltage	220-240VAC 50/60Hz
Rated load	800VA(Capacitive) 1000W(Resistive)
Power consumption	< 1W
Detection angle	360°
Detection area (Max.)*	Installation Height : 15m (forklift) / 12m (human) Detection Range (Ø) : HF: Ø = 24m (forklift) / 14m (human) PIR: Ø = 24m (forklift) / 20m (human)
Detection range	10% / 50% / 75% / 100%
Hold time	2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min
Daylight threshold	2 ~ 500Lux, Disable
Warming up time	30s
Operating temperature	-20°C ~ +50°C
IP rating	IP65
Sensor mode	HF, PIR, HF+PIR, HF / PIR

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



Rotary switch preset (Please see the location in 2. Installation)

Channel	Detection range	Hold-time	Daylight sensor
0	100%	5s	Disable
1	100%	1min	2Lux
2	100%	5min	10Lux
3	100%	5min	30Lux
4	100%	5min	10Lux
5	100%	5min	30Lux
6	100%	5min	Disable
7	100%	10min	2Lux
8	100%	10min	10Lux
9	100%	10min	30Lux
A	100%	10min	Disable
B	75%	10min	30Lux
C	50%	10min	10Lux
D	100%	30min	50Lux
E	100%	30min	Disable
F	100%	5s	2Lux

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

3. Functions

3.1 On/off Control

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

3.2 Lux Off Function

The built-in daylight sensor can read ambient natural light and switch off the fixture automatically whenever artificial light is unnecessary (natural light lux level exceeds daylight threshold). Note: if the stand-by time is preset at "∞", the fixture never switches off even when natural light is sufficient.

3.3 Load Indication

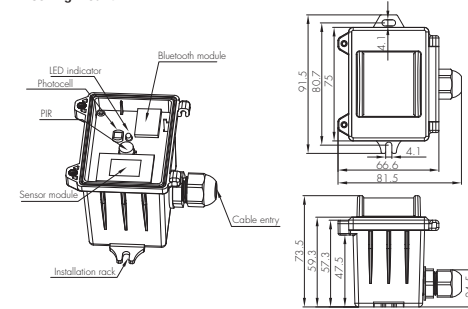
The light will flash ONCE rapidly after receiving the command from the remote controller. Note: There is no load indication (the light will not flash) when button ON/OFF, POWER 100% or POWER 80% is pressed.

4. Installation

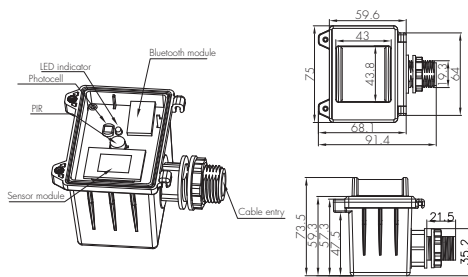
⚠ Warnings:

1. Installation of the sensor involves connecting it to the mains supply. This work must be carried out by a specialist in accordance with electrotechnical regulations.
2. Disconnect power supply before installing.

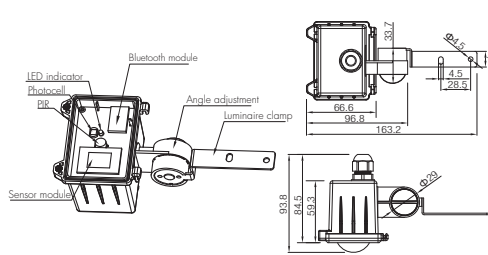
A. Ceiling mount



B. Screw to the Luminaire by conduit



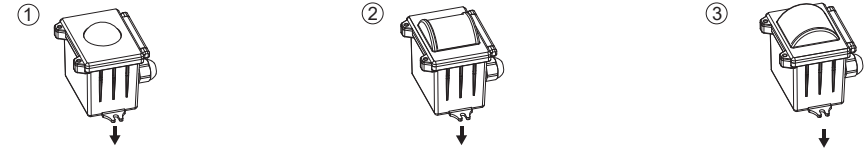
C. Attach to the shade by clamp



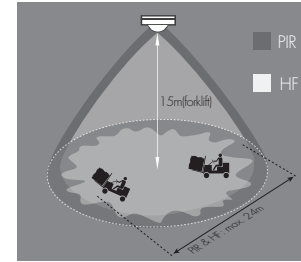
Note: We recommend the mounting distance between sensor to sensor should be more than 2m to prevent sensors from false-triggering.

5. Three Options for PIR Lens and Detection Patterns (End user can choose the suitable lens in real application for various requirements)

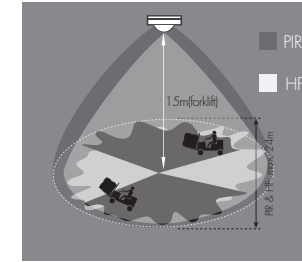
* For single person walking across, the detection range is reduced by 1/3.



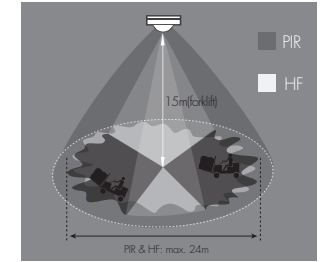
Detection pattern for forklift



PIR detection: Ø = 24m (max.)
HF detection: Ø = 24m (max.)

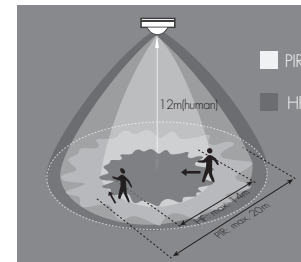


PIR detection: Ø = 24m (max.)
HF detection: Ø = 24m (max.)

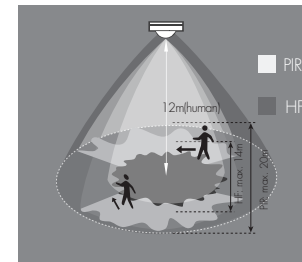


PIR detection: Ø = 24m (max.)
HF detection: Ø = 24m (max.)

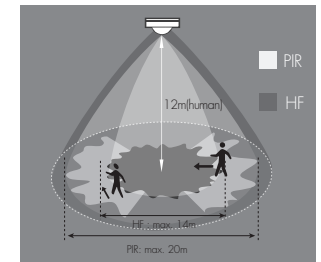
Detection pattern for human



HF detection: Ø = 14m (max.)
PIR detection: Ø = 20m (max.)

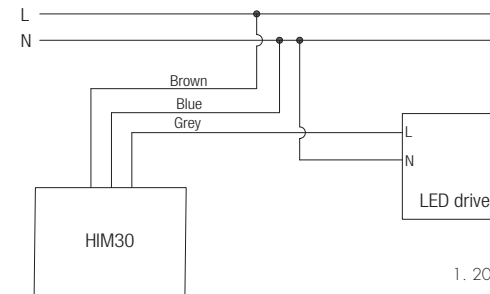


HF detection: Ø = 14m (max.)
PIR detection: Ø = 20m (max.)



HF detection: Ø = 14m (max.)
PIR detection: Ø = 20m (max.)

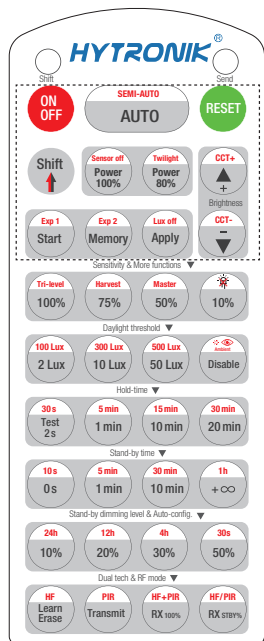
6. Wiring Diagram



1. 200 metres (total) max. for 1mm² CSA (Ta = 50°C)
2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50°C)

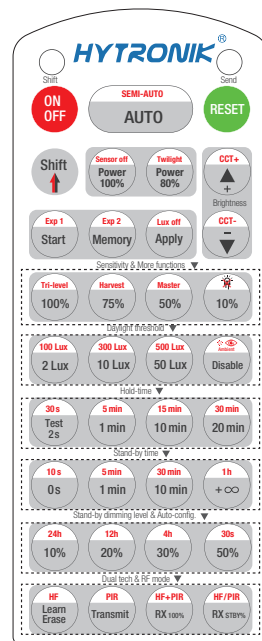
— This product should be installed by a qualified electrician.

7. Descriptions of the Button Functions (remote control HRC-11)



HRC-11

	Press button "ON/OFF" to select permanent ON or permanent OFF mode. * Press button "AUTO"/"RESET" to exit this mode.
	Press button "RESET", perform DIP Switch/Rotary Switch settings. *The default settings are: Detection range 100%; Hold-time 5min; Daylight threshold disable; HF/PIR detection mode.
	Press button "Shift", the LED on the top left corner is on to indicate mode selection. All values / settings in RED are valid for 20 seconds.
	Press button "AUTO" to initiate automatic mode. The sensor starts working and all settings remain as before the light is switched ON/OFF;
	Press button "AUTO" to initiate automatic mode. The sensor starts working and all settings remain as before the light is switched ON/OFF. <i>Note: "Semi-auto" function is disabled.</i>
	This key is not applicable on this product.
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	1. Press button "Start" to program. 2. Select the buttons in "Detection range", "Daylight threshold", "Hold-time", "Stand-by time", 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). <i>For example, to set detection range 100%, daylight threshold Disable, hold-time 5min, stand-by time +∞, the steps should be: Press button "Start", button "100%", "Disable", "Shift", "5min", "Shift", "+∞", "Memory". By pointing to the sensor unit(s) and pressing "Apply", all settings are passed on the sensor(s).</i>
	The "Lux off" function is activated as default. When the ambient lux level exceeds the target level continuously for more than 5 minutes, the lights will be turned off. In AUTO /SEMI-AUTO/Twilight modes, to disable "Lux off": 1. Press "Shift" button first, the red LED on. 2. Press "Lux off" button, the "Lux Off" function will be deactivated. The lights will not turn off even when the ambient lux level exceeds the target lux level but will dim down the brightness to the stand-by time level. <i>For Sensor LED indicator references: 1. Fast flash 1s, "Lux off" function activated. 2. Remains on 2s, "Lux off" function deactivated.</i>
	"Exp" refer to Expansion, these two buttons are reserved functions and pending future development.



HRC-11

Sensitivity & More functions	
100% 75% 50% 10%	In AUTO /SEMI-AUTO modes, press buttons in zone "Detection range" to set detection range at 100%/75%/50%/10%. <i>Note: only work for HF sensitivity</i>
	This key is not applicable on this product.
	This key is not applicable on this product.
Daylight threshold	
2 Lux 100 Lux 10 Lux 300 Lux 50 Lux 500 Lux Disable	Press buttons in zone "Daylight threshold" to set daylight sensor at 2Lux/ 10Lux / 50Lux / 100Lux / 300Lux/500Lux / Disable. <i>Note: To set daylight sensor at 100Lux / 300Lux/500Lux, press "Shift" button first.</i>
	1. Press button "Shift", the red LED on. 2. Press button "Ambient", the surrounding lux level is sampled and set as daylight threshold / target Lux level.
Hold-time mode	
Test 2s 1min 5min 10min 15min 20min 30min	In AUTO /SEMI-AUTO modes, press buttons in zone "hold-time" to set the hold-time at 2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min. <i>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.</i> <i>*To exit from Test mode, press button "RESET" or any button in "Hold-time".</i>
Stand-by time mode	
0s 10s 1min 5min 10min 30min +∞ 1h	Press buttons in zone "stand-by time", the stand-by period time can be extended by overlaying the time in the "hold-time" zone with the time in "stand-by time" zone. For example, press button "5 min" in "hold-time" zone + button "30 min" in "stand-by time" zone, the stand-by period time is total of 3.5 minutes. <i>Note: 1. To set stand-by time at 10s/ 5min / 30min / 1h, press "Shift" button first. 2. When "Lux off" is activated as default, press button "+∞", the product is a daylight sensor and will be turned off when the ambient lux level exceeds the target lux level, no longer motion detected. When "Lux off" function be deactivated, "+∞" means the fixture will remains on.</i>
Stand-by dimming level & Auto-config.	
10% 20% 30% 50%	This key is not applicable on this product.
24h 12h 30s 4h	This key is not applicable on this product.
Dual tech & RF mode	
	This key is not applicable on this product.
	This key is not applicable on this product.
	1. Press button "Shift", the red LED on. 2. Choose one of the four detection mode "HF only", "PIR only", "HF& PIR" or "HF/PIR".

8. Additional Information / Documents

- Regarding precautions for microwave sensor installation and operation, please kindly refer to www.hytronik.com/download ->knowledge ->Microwave Sensors - Precautions for Product Installation and Operation
- Regarding precautions for PIR sensor installation and operation, please kindly refer to www.hytronik.com/download ->knowledge ->PIR Sensors - Precautions for Product Installation and Operation
- Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy