

HIM30-A-L2

HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

HYTRONIK[®]
SENSORS & LIGHTING CONTROL



Benefits

High accuracy: DUAL Sense with HF and PIR technology

Autonomous: On/off occupancy control for up to 1000W

User-Friendly: With one-key commissioning via IR controller/Rotary Switch

Applications

Industrial Warehouse

Manufacturing Workshop

Logistics Center

Check Out the Complete System Solution on the Website:
<https://www.hytronik.com/product/HIM30-A-L2>



RED

UK
CA

Product Description

HIM30 is an IP65 rated highbay dual sense motion sensor integrating both HF and PIR technologies, designed to provide reliable on/off control in high-bay applications. By combining the advantages of HF and PIR sensing, it ensures stable detection performance across different environments. The device supports flexible parameter adjustment via remote control and a rotary switch, enabling convenient setup and efficient commissioning.

Functions and Features

See additional details at the end of datasheet



Ambient Daylight
Threshold



Dual Sense™
Detection Modes
(4 Options)

IP65

IP65 Protection



ON/OFF Control



One-key
Commissioning



Rotary Switch
Programming



Zero-Cross Relay
Operation

HIM30-A-L2

HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

Specifications

Main Capabilities

Dimming (Output) Interface	Relay On/Off
----------------------------	--------------

Sensor Data

Detection angle	360°
Max. Detection range (Diameter)	24.0 m
Maximum Mounting Height	15.0 m
Detection area	452 m ²
Sensitivity	10% / 50% / 75% / 100%

Electrical Data

Operating voltage range	220-240 VAC 50/60 Hz
Stand-by power (Psb)	<1W
Warming-up	30 s
Max withstandable in-rush current	120A@160μs
HF Transmission power	<0.2mW (HF)
Load capacitive	800.0 VA
Load resistive	1000.0 W

HIM30-A-L2

HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

Specifications

Technical	
Product weight	210.0 g
Product height	73.5 mm
Product length	83.0 mm
Product width	91.5 mm
Ambient temperature	-20 ~ +50 °C
Storage temperature	-40 ~ +70 °C
Humidity max	10 ~ 90%
IP Rate	IP65

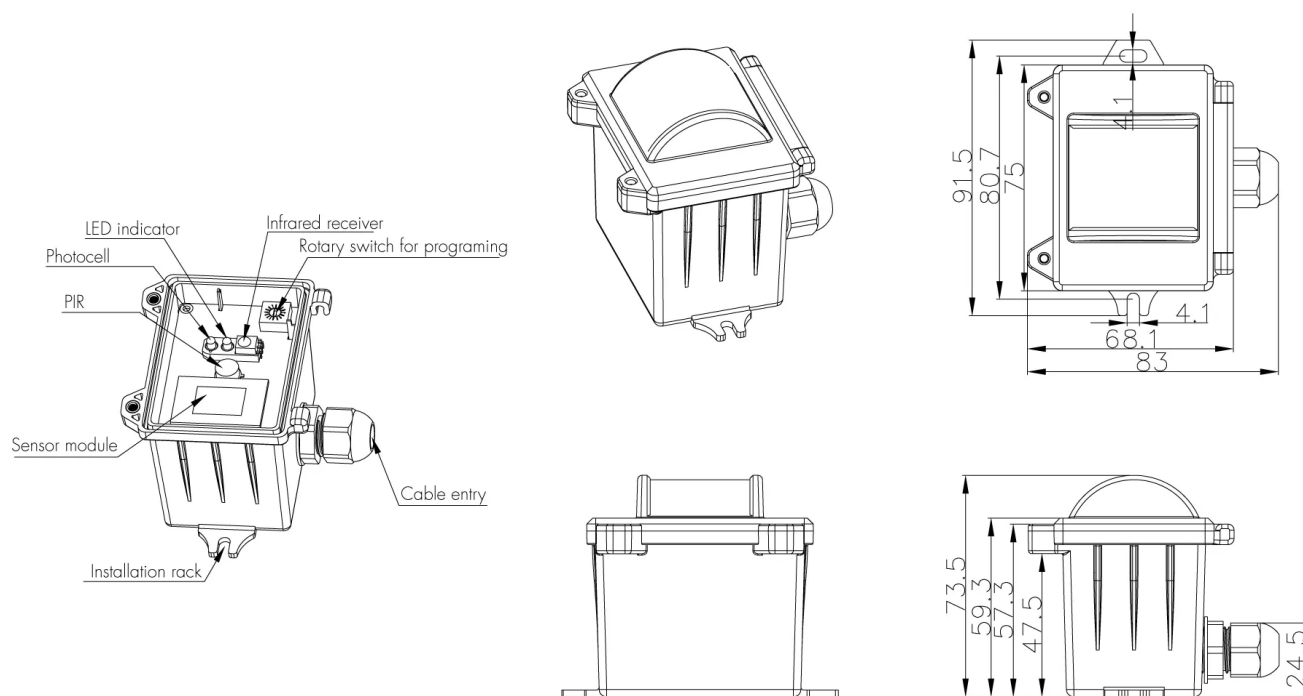
Standard	
EMC	EN 55015, EN61000-3-2/-3-3, EN 61547
LVD	AS/NZS 60669-1/-2-1, EN60669-1/-2-1
RED	EN 300440, EN301489-1, EN301489-3, EN 50663, EN 62479

HIM30-A-L2

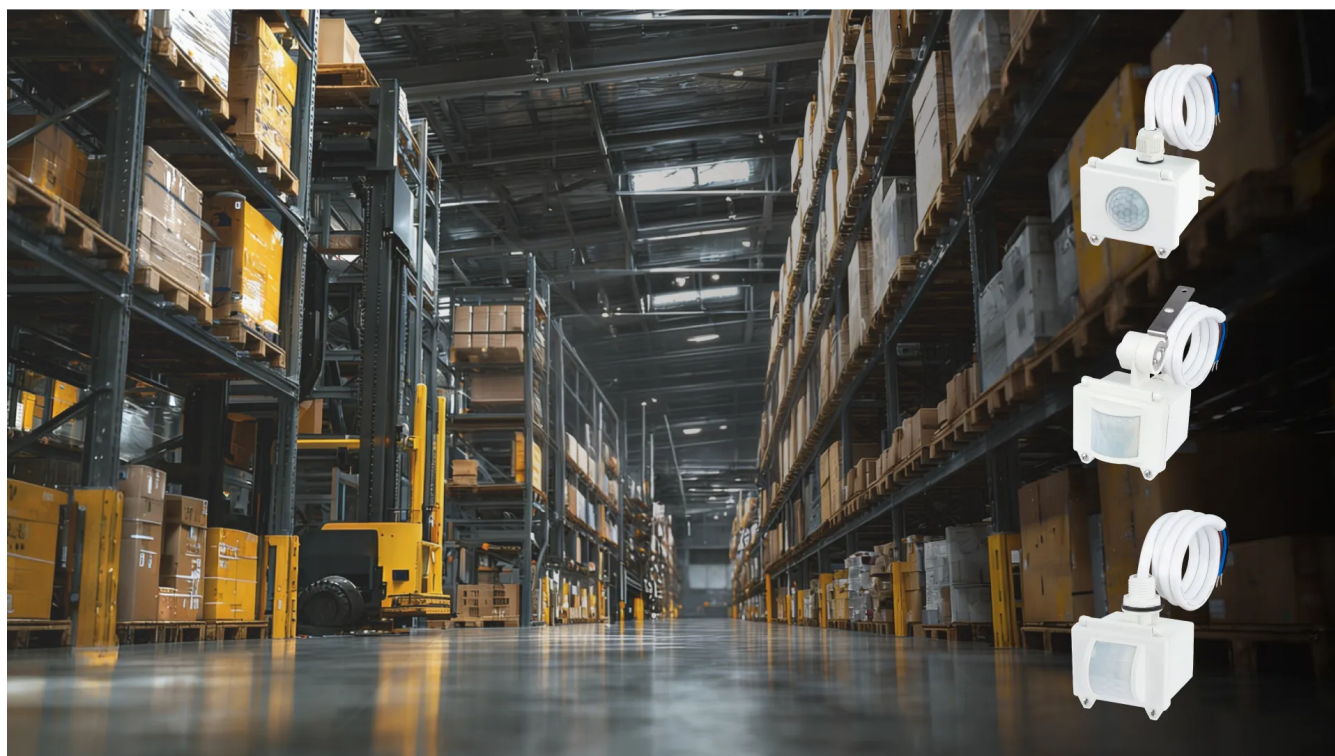
HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

HYTRONIK®
SENSORS & LIGHTING CONTROL

Technical Drawing



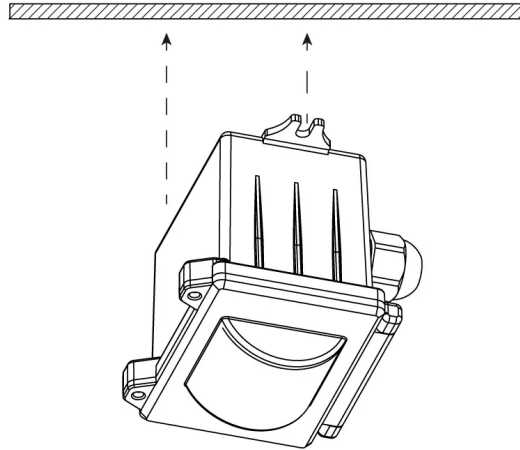
Application Example



HIM30-A-L2

HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

Installation Process



Detailed Installation Instructions

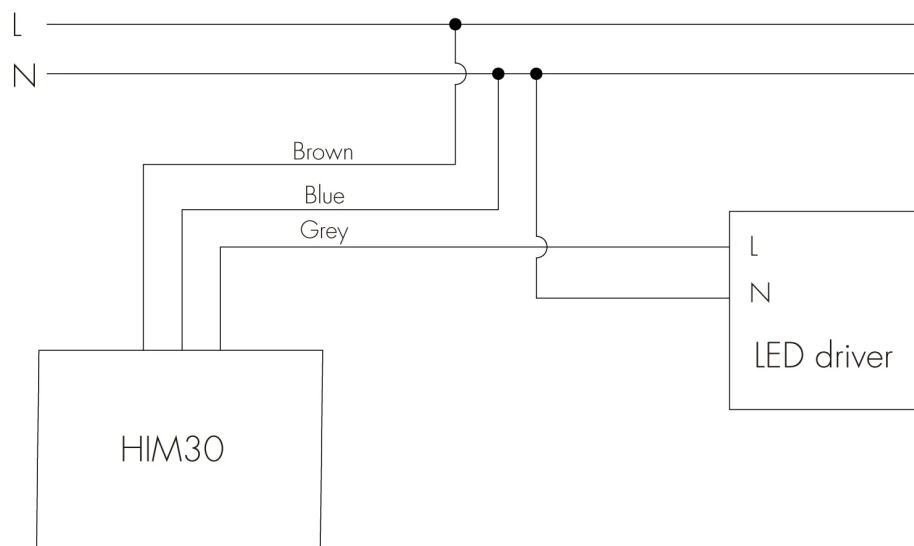
1. Surface Mounting

Secure the product via the two screw mounting holes.

HIM30-A-L2

HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

Wiring Diagram

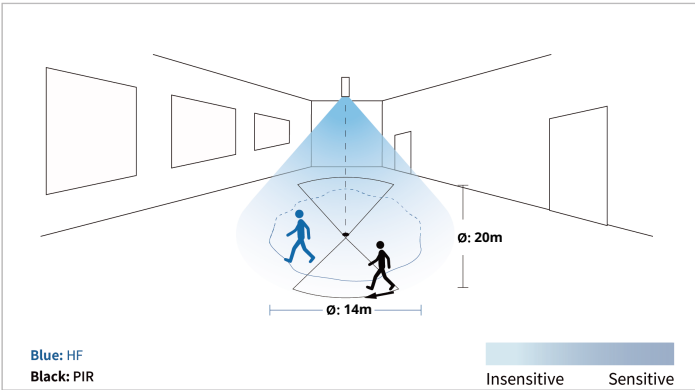


Detection Range

Single Person Walk (Ceiling mount)

- The data below is tested under following conditions:
- Single person walking
 - Sensor not connected to any driver that may have soft-on period
 - Testing temperature Ta = 20°C
 - The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

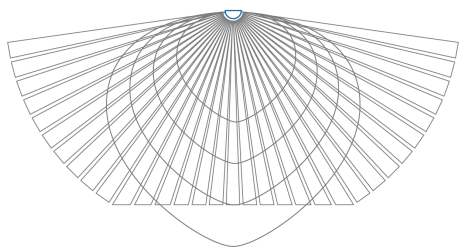
Detection example 12m mounting height:



PIR	
H[m]	12
Ø[m]	20

HF	Sensitivity
H[m]	100%
	Ø[m]
12	14

Detection schematic diagram

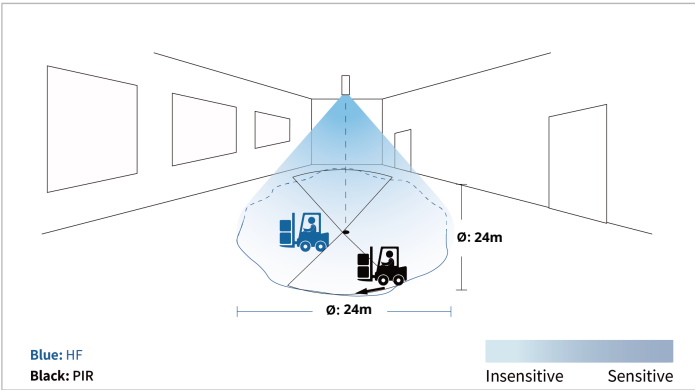


Detection Range

Forklift (Ceiling mount)

- The data is tested under following conditions:
- Forklift driving at a speed of 5km/h
 - Sensor not connected to any driver that may have soft-on period
 - Testing temperature Ta = 20°C
 - The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

Detection example 15m mounting height:



PIR	
H[m]	15
Ø[m]	24

HF	Sensitivity
H[m]	100%
	Ø[m]
15	24

Commissioning Instructions and Precautions

A. Installation Notes

1. This product should be installed by a qualified electrician.
2. To prevent mutual interference and false triggering, it is recommended to maintain a mounting distance of more than 2 meters between sensors.
3. Avoid placing the sensor near large metal objects, strong airflow, or heat sources that may affect HF or PIR detection stability.

B. HF operating frequency (Ghz)

1. 5.8Ghz+/-75MHz

C. Sensitivity Adjustment Notes

1. The adjustable sensitivity function is only effective for HF radar detection.

Warning: For additional important documents, including installation precautions, product guidelines, and guarantee conditions, please refer to the official downloads.

<https://hytronik.com/service/downloads>

HIM30-A-L2

HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

DIP Switch Settings



Rotary Switch Preset

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

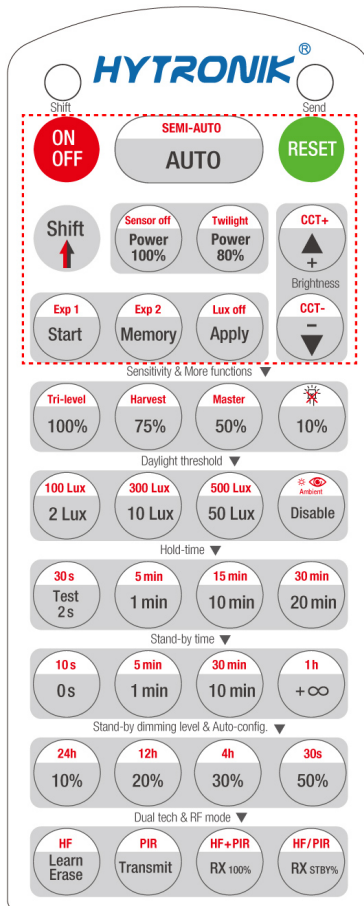
Note: settings can also be changed by remote control HRC-11. The last action controls.

Channel | Detection range | Hold-time | Daylight sensor

Ch0	100%	5s	Disable
Ch1	100%	1min	2Lux
Ch2	100%	5min	10Lux
Ch3	100%	5min	30Lux
Ch4	100%	5min	10Lux
Ch5	100%	5min	30Lux
Ch6	100%	5min	Disable
Ch7	100%	10min	2Lux
Ch8	100%	10min	10Lux
Ch9	100%	10min	30Lux
ChA	100%	10min	Disable
ChB	75%	10min	30Lux
ChC	50%	10min	10Lux
ChD	100%	30min	50Lux
ChE	100%	30min	Disable
ChF	100%	5s	2Lux

Commissioning via Remote Control - Page 1

Settings (Remote Control HRC-11)



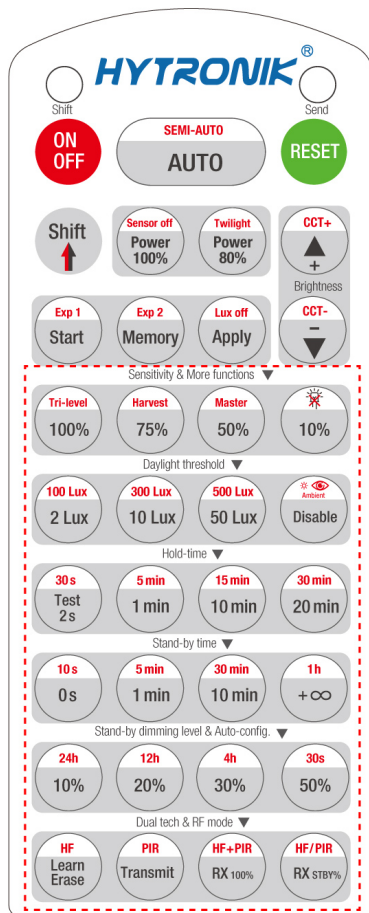
ON OFF	Press the "ON/OFF" button to set the luminaire to permanent ON mode or permanent OFF mode. Press the "AUTO" or "RESET" button to exit this mode and return to normal sensor operation. *Note: If the power is switched off and then restored in this mode, the sensor will automatically return to AUTO mode.
RESET	In any operating state, pressing the "RESET" button will restore the sensor to AUTO mode. For models with DIP switches or rotary selectors, the parameters will return to the current DIP switch or rotary selector settings after reset. For models without DIP switch settings, the parameters will return to the factory default settings after reset. The resettable parameters include: operating mode, brightness, sensitivity, hold-time, stand-by time, and daylight threshold. *This product is set by default to: Detection range 100%; Hold-time 5min; Daylight threshold disable; HF/PIR detection mode.
Shift	Press the "Shift" button to activate the auxiliary function layer. The indicator LED in the upper-left corner will light up to indicate the mode selection status. When the indicator is on (for 20 seconds), all buttons marked in red become selectable.
SEMI-AUTO	This key is not applicable on this product.
AUTO	Press the "AUTO" button to enter automatic sensing mode. The sensor will exit ON/OFF mode and SEMI-AUTO mode and return to automatic operation. All parameters will remain as previously set.
Sensor off	This key is not applicable on this product.
Twilight	This key is not applicable on this product.
Power 100% Power 80%	This key is not applicable on this product.
CCT+ CCT-	This key is not applicable on this product.
Start Memory Apply	Press the "Start" button to enter programming mode. Select the required parameters in the Sensitivity, Daylight threshold, Hold-time, Stand-by time, and Stand-by dimming level areas. Press the "Memory" button to store the parameters in the remote control, then press the "Apply" button to send the parameters to the sensor. The same parameter group can be applied to multiple sensors at the same time. Reset will not clear the parameters stored in Memory.
Lux off	Press the "Shift" button first. When the red indicator lights up, press the "LUX OFF" button to enable or disable the Lux-off function. When the function is enabled, the indicator will flash for 1 second; when the function is disabled, the indicator will flash for 2 seconds. The Lux-off function is enabled by default. In T1, if the ambient light level remains higher than the preset value for more than 5 minutes, the luminaire will switch off automatically. When Lux-off is disabled, the luminaire will not switch off due to excessive ambient light and will only operate according to the sensor's delay time and stand-by time settings. *Note: This product does not support an independent T2 function. Any configured T2 time is automatically added to the T1 time. No dimmed (micro-light) state will occur at the end of the T2 period.
Exp 1 Exp 2	"Exp" stands for "Expansion". These two buttons are reserved functions for future development.

HIM30-A-L2

HF+PIR Highbay | ON/OFF | Surface mounting + Vertical lenses

Commissioning via Remote Control - Page 2

Settings (Remote Control HRC-11)



Sensitivity & More Functions	
100% 75% 50% 10%	In AUTO / SEMI-AUTO mode, pressing the buttons in the "Sensitivity" area allows the detection range to be set to 100%, 75%, 50%, or 10%. The setting takes effect immediately, overrides the DIP switch settings, and will be stored by the sensor. *Note: only work for HF sensitivity
Tri-level Harvest	This key is not applicable on this product.
Master	This key is not applicable on this product.
Daylight threshold	
2 Lux 100 Lux 10 Lux 300 Lux 50 Lux 500 Lux Disable	Press the buttons in the "Daylight threshold" area to set the switch-on illuminance to 2Lux / 10Lux / 50Lux / 100Lux / 300Lux / 500Lux / Disable. The setting takes effect immediately, overrides the DIP switch settings, and will be stored by the sensor. *Note: When setting 100Lux / 300Lux / 500Lux, the "Shift" button must be pressed first.
Ambient	Press the "Shift" button first. When the red indicator lights up, press the "Ambient" button. The sensor will sample the current ambient light level and set it as the switching threshold / target lux level. After pressing the button, the load will turn off for approximately 5 seconds. During the learning process, the indicator will flash. When the learning is completed, the luminaire will turn on for 5 seconds and then turn off. After that, the luminaire will only turn on again when motion is detected. If the learned value exceeds the saturation level, the indicator will flash rapidly 5 times, and the daylight threshold will be automatically set to Disable. *Note: If the device is equipped with DIP switches, the DIP switch settings and the remote control settings will override each other. The latest setting will take priority.
Hold-time mode	
Test 2s 30s 1min 5min 10min 15min 20min 30min	In AUTO / SEMI-AUTO mode, pressing the buttons in the "Hold-time" area allows the T1 delay time to be set to 2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min. The setting takes effect immediately, overrides the DIP switch settings, and will be stored by the sensor. *Note: When setting 30s / 5min / 15min / 30min, the "Shift" button must be pressed first. The 2s setting is only used for test mode. In this mode, the stand-by time and daylight control functions will be disabled. Press RESET or any Hold-time button to exit test mode.
Stand-by time mode	
0s 10s 1min 5min 10min 30min +∞ 1h	Press the buttons in the "Stand-by time" area to set the stand-by time to 0s / 10s / 1min / 5min / 10min / 30min / 1h / +∞. *Note: This product does not support an independent T2 function. Any configured T2 time is automatically added to the T1 time. No dimmed (micro-light) state will occur at the end of the T2 period.
Stand-by dimming level & Auto-config.	
10% 20% 30% 50% 24h 12h 30s 4h	This key is not applicable on this product.
Dual tech & RF mode	
Learn Erase	This key is not applicable on this product.
Transmit	This key is not applicable on this product.
HF HF+PIR PIR HF/PIR	Press the Shift button first until the red indicator lights up, then select one of the following detection modes. Press the HF only button to enable microwave sensing only, and the PIR sensing will be disabled. Press the PIR only button to enable PIR sensing only, and the microwave sensing will be disabled. Press the HF + PIR button, and motion will only be detected when both microwave and PIR are triggered simultaneously. Press the HF / PIR button, and motion will be detected when either microwave or PIR is triggered.

Functions and Features



Ambient Daylight Threshold

This feature allows users to set a custom daylight-harvesting target lux level based on the actual ambient light at the installation site. After manually adjusting the luminaire to a comfortable brightness, the user can record the current lux value as the new daylight threshold via the remote controller or the Koolmesh app. The sensor will then use this stored value as the reference for daylight-dependent dimming, ensuring a personalized and accurate daylight harvesting performance.



Dual Sense™ Detection Modes (4 Options)

The product offers four selectable detection modes using Dual-Sense™ technology, allowing HF and PIR sensing to be used independently or in combination. Installers can choose HF only, PIR only, HF or PIR (either detector activates), or HF and PIR (both detectors required) via DIP switch, remote control, or the Koolmesh app. This flexibility enhances detection performance, improves onsite troubleshooting, and helps avoid false triggering in complex environments.

For further information, please refer to: <https://hytronik.com/solutions/lighting-control-features/dual-sense-HF-PIR>

IP65

IP65 Protection

This product features an IP65-rated enclosure, providing complete protection against dust ingress and low-pressure water jets to ensure reliable operation in demanding indoor and outdoor environments. The robust environmental sealing supports long-term stability and consistent performance in applications such as warehouses, parking areas and industrial facilities.



ON/OFF Control

The product supports basic ON/OFF control of the connected luminaire, allowing the light to be switched fully on or off through the sensor's detection logic or an external control input. This provides straightforward lighting control for applications that do not require dimming functionality.



One-key Commissioning

This feature allows commissioning to be completed with a single key operation on the remote controller. A predefined configuration sequence is executed automatically, enabling quick setup and reducing the time and effort required for on-site adjustments. One-key commissioning simplifies complex procedures and supports efficient, reliable deployment of lighting control systems.



Rotary Switch Programming

The product includes a built-in rotary switch that allows quick selection of one of sixteen preset programs, enabling fast installation without external tools. Each program applies predefined settings for parameters such as detection range, hold time, daylight threshold, standby time and standby dim level, while still allowing individual parameter adjustments for flexible customization on site.



Zero-Cross Relay Operation

The product operates its relay at the AC zero-cross point, reducing inrush current through the relay contacts when switching the load. By minimising electrical stress during each switching event, this method supports higher load capability and extends the operational lifetime of the relay in practical lighting applications.

Check out for further explanation of features

<https://hytronik.com/solutions/lighting-control-features>