HDL-MSP02.4C

Ceiling Mount PIR & LUX Sensor

buspro

Datasheet

Issued: July 7, 2019

File Edition: V1.0.0



Figure 1. Ceiling Mount PIR & LUX Sensor

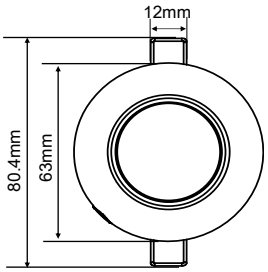


Figure 2. Dimensions-Front View

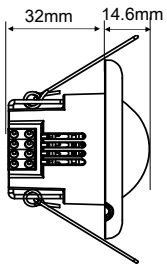


Figure 3. Dimensions-Side View

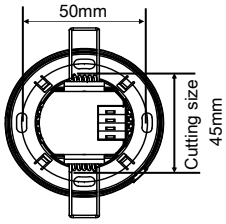


Figure 4. Dimensions-Back View

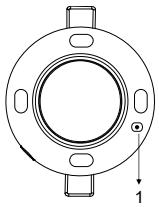


Figure 5-1. Components - Interior View

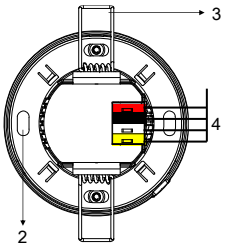


Figure 5-2. Components - Back View

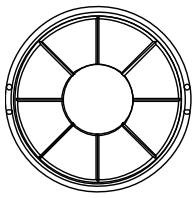
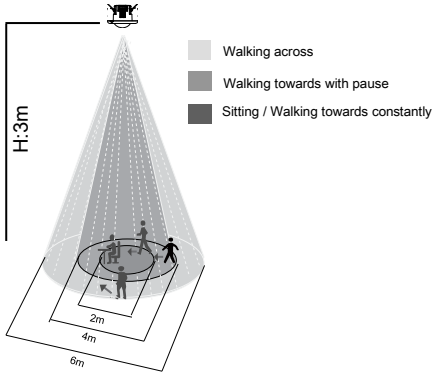


Figure 6. Accessory - Angle Cover



Detection Range (At 25℃)

Mounting height	Sitting / Walking towards constantly	Walking towards with pause	Walking across
3m	2m	4m	6m

Figure 7. Detection range

Overview

Ceiling Mount PIR & LUX Sensor (See Figure 1) includes PIR motion sensor, LUX sensor. And internal logic block can combine all the sensors for different application in accordance with customers' needs. The sensor supports HDL security mode and command.

Functions

- Equipped with Lux sensor, PIR sensor and universal switch, which can be used as logic conditions.
- 2 logic relations (OR, AND) can be selected.
- 24 logic blocks function, up to 20 control targets in each logic block.
- Adjustable PIR sensitivity from 1 to 10.
- Universal switch numbers are assigned to 201-248 in logic conditions. And 2 switch numbers for each logic and universal switch supports auto-off function. (Delay time: from 1 to 3600 seconds).
- Logic can trigger different targets no matter it is true or false.
- Security function (security module required)
- Online update supported via HDL Buspro Setup Tool.

Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable.
- Buspro connection - Series connection (hand-in-hand recommended).
- Installation position - Ceiling mount
- Check the connection, avoid any mistake
- Installation position: Indoor, keep it away from AC outlet and heat source.

Product Information

Dimensions - See Figure 2 - 4

Components - See Figure 5 - 1 and 5 - 2

1. Address setting button & module indicator:

Keep pressing the button for 3 seconds, then the address of the module can be read and modified in HDL Buspro Setup Tool. (Address management → Address modification.)

Indication: The indicator can be set to indicate status or not. If yes, when the sensor detects movement, the LED indicator will turn on; if not, whether there is movement or not, it always keeps off.

2. Screw hole

3. Spring clips

4. HDL Buspro: From top to bottom: +DC24V、COM、DATA-、DATA+

Accessory - See Figure 6: Angle cover is an accessory for blocking PIR sensing range. If users want to block a certain angle of PIR sensing range, they can remove the parts of this accessory they don't need and install it into the Fresnel lens. Users can adjust angle according to their own needs.

Detection range - See Figure 7

Product installation

Ceiling-mounted - See Figure 8 - 10

Step 1. When installing the sensor in the thin ceiling, produce an opening of diameter 45mm in the ceiling.

Step 2. Fix the sensor into position with the assistance of the spring clips after wiring.

Flush-mounted - See Figure 11 - 14

Step 1. When installing the sensor in the thick wall, produce an opening of diameter 45mmn and depth of 35mm in the wall.

Step 2. Remove the spring clips and pry apart the cover and the senor.

Step 3. Fix the sensor in the wall with screws.

Step 4. Attach the cover to the sensor.

Safety Precautions

- The installation and commissioning of the device must be carried out by HDL or the organization designated by HDL. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this document.
- Please do not privately disassemble the device or change components, otherwise it may cause mechanical failure, electric shock, fire or body injury.
- Please resort to our customer service department or designated agencies for maintenance service. The warranty is not applicable for the product fault caused by private disassembly.

Package Contents

HDL-MSP02.4C*1 / Buspro connector*1 / Angle cover*1 / Datasheet*1

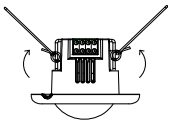


Figure 8

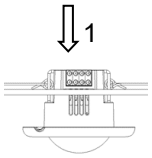


Figure 9

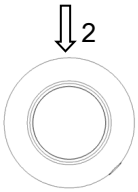


Figure 10

Figure 8 - 10. Installation – Ceiling-mounted

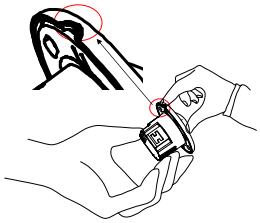


Figure 11

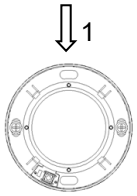


Figure 12

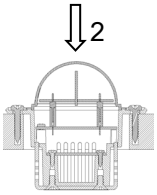


Figure 13

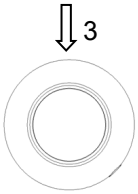


Figure 14

Figure 11 - 14. Installation – Flush-mounted

Technical Data

Basic Parameters

Working voltage	18~30V DC
Working current	20mA/24V DC
Detection range	Φ6m (Installation height: 3m)
Illumination sensing range	0-500lux

External Environment

Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%

Specifications

Dimensions	Φ63×46.6(mm)
Net weight	91g
Housing material	ABS, Infrared lens
Installation	Ceiling-mounted/Flush-mounted (See Figure 8 -10/Figure 11 -14)
Protection rating (Compliant with EN 60529)	IP20

Name and Content of Hazardous Substances in Products

Components	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)
Plastic	o	o	o	o	o	o
Hardware	o	o	o	o	-	-
Screw	o	o	o	×	-	-
Solder	×	o	o	o	-	-
PCB	×	o	o	o	o	o
IC	o	o	o	o	×	×

The symbol “-” indicates that the hazardous substance is not contained.

The symbol "o" indicates that the content of the hazardous substances in all the homogeneous materials of the component is below the limit requirement specified in the Standard IEC62321-2015.

The symbol “×” indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement specified in the Standard IEC62321-2015.

HDL Buspro Cable Guide

HDL Buspro	HDL Buspro Cable	CAT5/CAT5E
DATA+	Yellow	Blue/Green
DATA-	White	Blue white/Green white
COM	Black	Brown white/Orange white
24V DC	Red	Brown/Orange

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