HDL®

HDL-MSP07M.4CT

Ceiling Mount 7-in-1 Sensor

buspro

Datasheet

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Figure 1. Ceiling Mount 7-in-1 Sensor
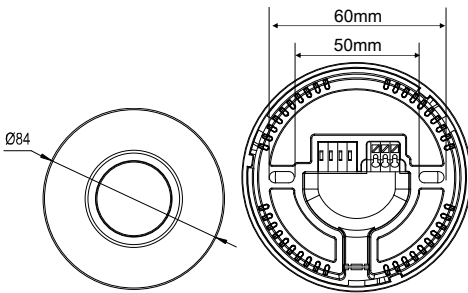

Figure 2. Dimensions-Front View

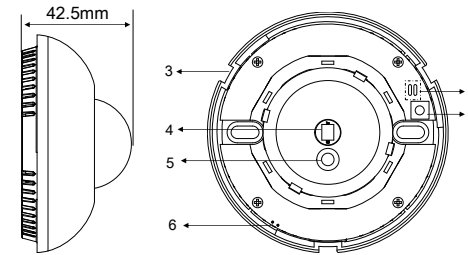Figure 3. Dimensions-Back View

Figure 4. Dimensions-Side View

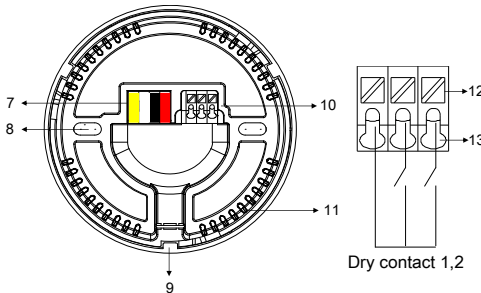

Figure 5. Components - Interior View

Figure 6. Components - Back View
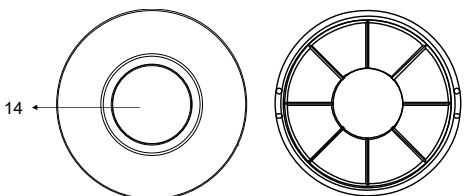

Figure 7. Dry contact wiring

Figure 8. Components - Front View

Figure 9. Accessory - Angle cover

Overview

Ceiling Mount 7-in-1 Sensor (See Figure 1) includes PIR motion sensor, temperature sensor, LUX sensor, dry contact and universal switch control, etc. It can satisfy different requirements according to different logics. It supports HDL security mode and security command.

Functions

- Built-in PIR sensor, temperature sensor, LUX sensor, dry contact and universal switch control
- 8 logic input conditions: PIR sensor, temperature2 sensor, LUX sensor, 2 dry contact inputs, 2 universal switches and logical condition
- Adjustable sensitivity from 1 to 100
- 24 logic blocks. Universal switch numbers are assigned to 201-248 in logic conditions, 2 switch numbers for each logic, universal switch has auto-off function (relay time from 1 to 3600 seconds).
- Logic can trigger the control target no matter it's valid or not. Up to 10 control targets can be triggered by each logic block.
- Supports update from HDL Buspro Setup Tool 2.
- Constant LUX function

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.
- Dry contact cable requirement: Applicable wire: 0.5~0.75mm², stripping wire length: 8.5~10mm, shield cable with length less than 20m recommended

Product Information

Dimensions - See Figure 2 - 4

Components - See Figure 5 , 6 , 8

1. LED indicator and IR indicator

Flashes in green when then module is in normal working mode

Turns red and keep on when sensor detects movement

Note: Indicators can be set via HDL Buspro Setup Tool.

2. Button for module address setting

Press for 3s, green indicator on. Go to "Address management"→"Address modification" of HDL Buspro Setup Tool to modify the address setting.

3. Slot
4. PIR sensor
5. LUX sensor
6. Temperature sensor
7. HDL Buspro, from right to left: DC24V, COM, DATA-,DATA+
8. Screw holes
9. Wiring channel, open it for wiring
10. Dry contact 1,2
11. Vents
12. Pushrod
13. Wiring hole
14. Fresnel lens

Dry contact wiring - See Figure 7

The wires are put in the wiring hole, and then loosen the pushrod, the wires will be locked.

Put wires in the wiring hole, and loosen the pushrod to lock the wires.

Open the cover to install the sensor, then fix by screws.

Open the cover - See Figure 8: Rotate the cover counterclockwise to take off the cover.

Install the cover - See Figure 8: Put the cover to the correct slot and rotate the cover clockwise.

Accessory - See Figure 9: Angle cover is used to shield PIR sensor signal from certain angle, in order to enlarge or narrow down detection zone according to users' preference.

Detection range - See Figure 10

Installation - See Figure 11 - 14

Step 1. Rotate and open the sensor.

Step 2. Fix the sensor base on the wall box with screws.

Step 3. Put the cover on the sensor.

Safety Precautions ⚠ WARNING

- 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-MSP07M.4CT*1 / Buspro connector*1 / Screws*2 / Angle cover*1 / Datasheet*1

Detection Range (At 25℃)

Mounting height	Sitting / Walking towards constantly	Walking towards with pause	Walking across
3m	3m	5m	6m

Figure 10. Detection range
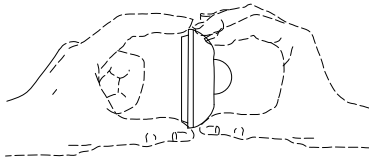
Figure 11
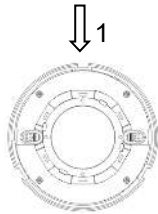
Figure 12

Figure 13
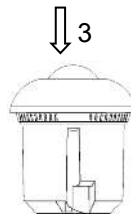
Figure 14

Figure 11 -14. Installation

Technical Data

Basic Parameters

Working voltage	18~30V DC
Working current	25mA/24V DC
Detection range	Φ6m (Installation height: 3m)
Temperature detection range	-20℃~60℃
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	Φ84mm×42.5mm
Net weight	55.4g
Housing material	ABS
Installation	Ceiling mount (See Figure 11 - 14)
Protection rating (Compliant with EN 60529)	IP20

Name and Content of Hazardous Substances in Products

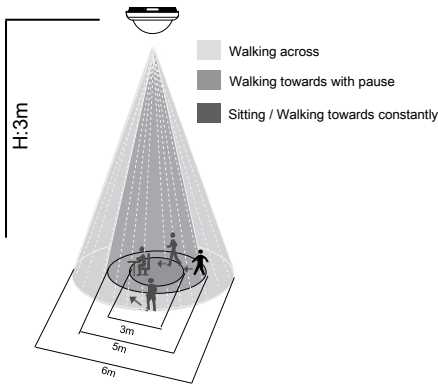| Components	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)
Plastic	o	o	o	o	o	o
Hardware	o	o	o	o	-	-
Screw	o	o	o	×	-	-
Solder	×	o	o	o	-	-
PCB	×	o	o	o	o	o
IC	o	o	o	o	×	×

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