



Datasheet

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Figure 1. KNX Ceiling Mount OmniSense Sensor

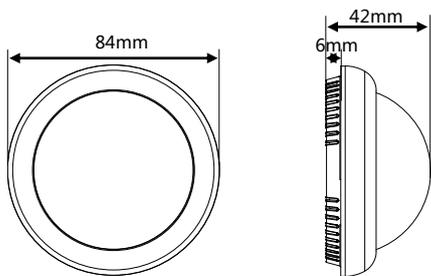


Figure 2. Dimensions - Front View Figure 3. Dimensions - Side View

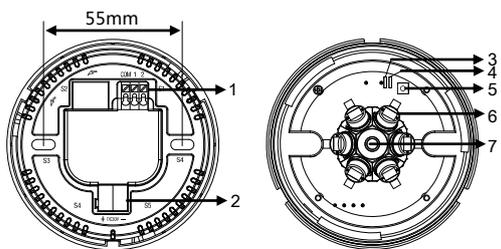
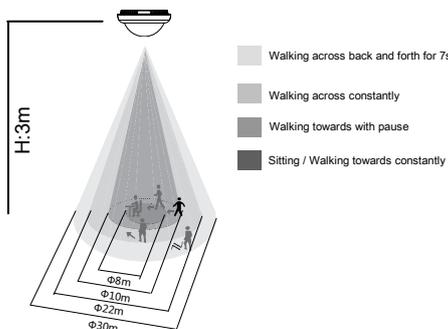


Figure 4. Dimensions - Back View Figure 5. Components - Interior View



Detection Range (At 29°C)

Mounting height	Sitting / Walking towards constantly	Walking towards with pause	Walking across constantly	Walking across back and forth for 7s
3m	8m	10m	22m	30m

Figure 6. Detection range

Overview

KNX Ceiling Mount OmniSense Sensor (See Figure 1) can detect movement at a distance of up to 24 meters, which can be controlled logically by different input conditions. Meanwhile, the parameters can be set via ETS software to select the detection area, and 6 detection areas in total can be selected.

Functions

- With 2CH lighting control, 4 sections of brightness and delay time can be set in dimming output. With gradually dimming effect, the sensor supports automatic or semi-automatic mode. Telegram locking/unlocking and delay time can be set.
- With 2CH constant brightness control, 4 dimming values and forced operation can be set.
- The sensor has 5 logic blocks and each block can control 10 object outputs. Dry contact and telegram locking/unlocking and delay time can be set.
- Control types: Switch control, Absolute dimming control, Curtain control, Alarm control, Percentage control, Sequence control, Scene control, String(14 bytes) control, Threshold control, Logic combination control.
- Logic inputs: PIR sensor status, brightness value, temperature value, dry contact status and external telegrams.
- 2 logical relations: AND, OR.
- 2 working modes: Single mode and master / slave mode.
- 2CH dry contact can be set as dry contact and LED status display and the operation function can be set as switch control, dimming control, scene control.
- The detection area can be selected.

Important Notes

- Installation - This device should be mounted at the ceiling at a recommended height of 3m from the floor and away from air conditioners or high heat source.
- Programming - The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).
- The KNX Bus voltage is 21- 30V DC.

Product Information

Dimensions - See Figure 2 - 4

Components - See Figure 5

1. Dry contact connector, from left to right are COM, dry contact 1, dry contact 2.
2. KNX/EIB Bus connector, KNX Bus voltage: 21-30V DC.
3. Programming LED (VE7): The LED is on when the sensor is in programming state, off when the sensor exits the programming state, and off when the sensor works properly.
4. Working LED (VE8): LED turns on if any movement is detected, otherwise LED turns off.
5. Programming button.
6. IR detectors: 6 IR detectors in total. Each detector has specified number (S1, S2, S3, S4, S5, S6) on the bottom housing. By enabling different IR detectors, corresponding areas can be detected.(6 areas in total)
7. LUX sensor.

Detection Range - See Figure 6

Installation - See Figure 7 - 10

- Step 1. Rotate and take off the cover.
- Step 2. Fix the sensor onto the wall box with screws.
- Step 3. Rotate and 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 takes no responsibility for all consequences caused by installation and wire connection which 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

M/HSD24.1*1 / Screw*2 / Datasheet*1

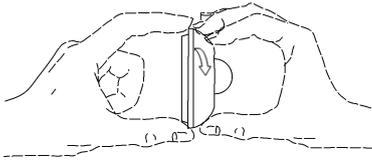


Figure 7



Figure 8

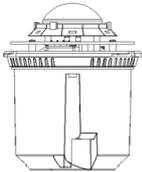


Figure 9

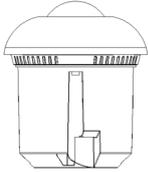


Figure 10

Figure 7-10. Installation

Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	10mA/30V DC
Communication	KNX
Cable diameter of KNX terminal	0.6 - 0.8mm
PIR detection range	Φ30m (Installation height: 3m)

External Environment

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

Specifications

Dimensions	Φ84×42 (mm)
Net weight	60g
Housing material	ABS, PC
Installation	Ceiling mount (See Figure 7 - 10)
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	x	-	-
Solder	x	o	o	o	-	-
PCB	x	o	o	o	o	o
IC	o	o	o	o	x	x

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 "x" 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.

KNX Cable Guide

KNX	KNX Cable
-	Black
+	Red

Technical support

E-mail: support@hdlautomation.com

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