HDL®

M/HS05.1
KNX Ceiling Mount PIR & Lux Sensor

Hardware Version : D

KNX®

Datasheet
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Figure 1. KNX Ceiling Mount PIR & Lux Sensor
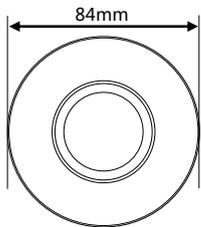

| 84mm | 42.6mm |

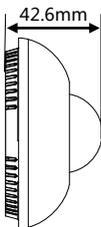Figure 2. Dimensions - Front View   Figure 3. Dimensions - Side View
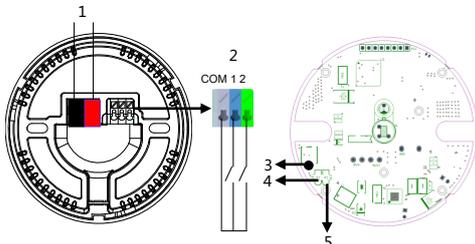
Figure 4. Components - Back View   Figure 5. Components - Interior View

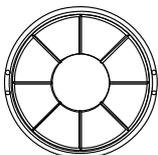Figure 6. Accessory - Angle cover

- Walking across
- Small steps
- Sitting / Slight movements / Walking towards

H:3m

360°
ø 4m
ø 4.5m
ø 8m
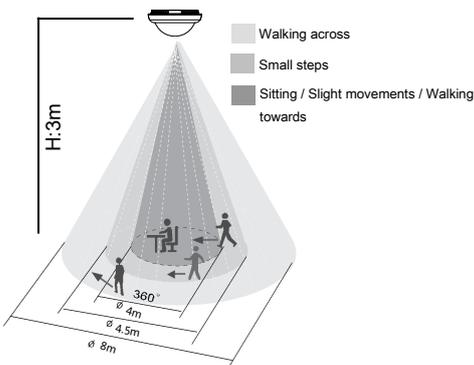
Detection Range (At 25℃)

Mounting height /	Sitting / Slight movements / Walking towards	Small steps	Walking across
3m	4m	4.5m	8m

Figure 7. Detection Range

Overview

KNX Ceiling Mount PIR & Lux Sensor (See Figure 1) is a multi-function sensor which contains PIR sensor, temperature sensor, Lux sensor, dry contact and external telegram. 5 logical blocks are available and each block contains 10 object outputs. Logical relations AND, OR can be set and single mode and master / slave mode are supported.

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, dimming values and forced operation can be set.
- The sensor has 5 logic blocks and each block contains 10 object outputs. Dry contact, telegram locking/unlocking and delay time can be set.
- Control types: Switch control, Absolute dimming control, Shutter control, Alarm control, Percentage control , Sequence control, Scene control, String(14 bytes) control, Threshold control, Logic combination control.
- 5 Logic inputs: PIR sensor status, brightness value, temperature , 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 and percentage control.
- The logic validity can be set by external telegram.

Important Notes

- Installation - Installed indoor. Install the sensor away from large area of mental, air conditioners or heat sources.
- Programming - The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).

Product Information

Dimensions - See Figure 2 - 3
Components - See Figure 4 - 5

1. KNX terminal.
2. Dry contact, from left to right are COM, dry contact 1, dry contact 2.
3. Programming button.
4. Programming LED indicator(VE1): 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.
5. Working LED (VE2): LED on if any movement is detected, otherwise LED off.

Angle cover - See Figure 6

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 7

Installation - See Figure 8 - 11

Step 1. Rotate and take the cover off. Screw the plate on the wall box with screws.
Step 2. Install the sensor onto the plate with screws.
Step 3. Rotate and attach the cover to 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 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

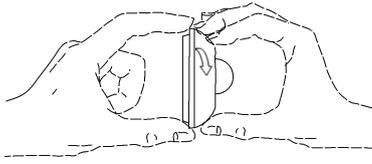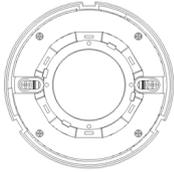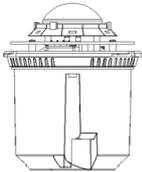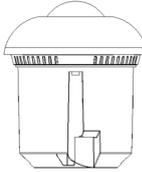M/HS05.1*1 / Datasheet*1 / Angle cover*1 / Screw*2

Figure 8

⬇ 1

Figure 9

⬇ 2

Figure 10

⬇ 3

Figure 11

Figure 8-11. Installation

Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	5mA/30V DC
Communication	KNX
Cable diameter of KNX terminal	0.6 - 0.8mm
PIR detection range	Φ8m (Installation height: 3m)

External Environment

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

Specifications

Dimensions	Φ84×42.6 (mm)
Net weight	50g
Housing material	ABS , PC
Installation	Ceiling mount (See Figure 8 - 11)
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.

KNX Cable Guide

KNX	KNX Cable
-	Black
+	Red