M/SIS05.1

KNX Presence Sensor

Hardware Version: A

Datasheet

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File Edition: V1.02

Figure 1. KNX Presence Sensor

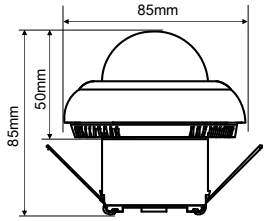


Figure 2. Dimensions - Front View

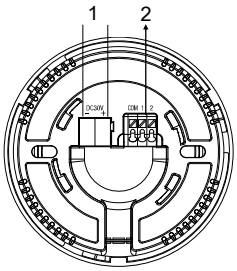


Figure 3. Components - Back View(1)

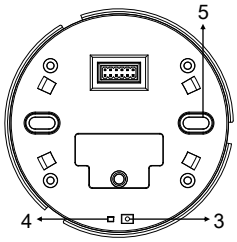
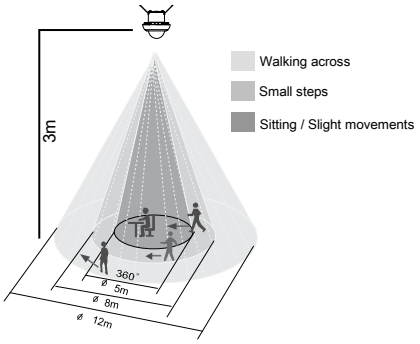


Figure 4. Components - Back View(2)



Detection Range (25℃)

Mounting height	Sitting / Slight movements	Small steps	Walking across
3m	5m	8m	12m

Figure 5. Detection Range

Overview

KNX Presence Sensor (See Figure 1) is a multi-function sensor which contains PIR sensor, temperature sensor and brightness sensor. 4 independent logical blocks and 1 combined block 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.

The main function includes:

- 4 independent logical blocks and 1 combined block are available, and each block contains 10 object outputs. Control targets include switches, dimming, alarm devices, etc.
- 1 sensor status feedback function block, including data and status feedback for human presence detection and photosensitive sensors, and intrusion alarms.
- 2 lighting control function blocks, which support automatic and semi-automatic control, and switch control according to ambient illumination.
- 1 constant brightness automatic adjustment function block can compare the ambient illumination with the set illumination value, adjust the brightness of the light, and select the curtain combination dimming.
- 2 HVAC control blocks enable automatic and semi-automatic mode, HAVC open delay and duration settings.
- 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.
- Logic inputs: PIR sensor status, brightness value, temperature and humidity value, and external telegrams.
- 2 logical relations: AND, OR
- 2 working modes: Single mode and master / slave mode.
- The logic validity can be set by external telegram.

Components

Dimensions - See Figure 2

Components - See Figure 3 - 4

1. KNX interface
2. Dry contact connector, from left to right are COM, Dry Contact 1, Dry Contact 2 (The dry contact function of this version is not available, and it is temporarily reserved for the next version.)
3. Programming button
4. Programming LED indicator: The LED is on when the sensor is in programming mode, off when the sensor exits programming mode, and off when the sensor works properly.
5. Screw hole

Detection Range - See Figure 5

Note(s)

- Installation - Installed indoor, away from large mental object, air conditioners, heat sources and Wi-Fi router.
- Programming - The device is compliant with KNX standard and the parameters are set by the Engineering Tool Software (ETS).
- The KNX bus voltage is 21-30V DC.

Safety Precautions

- Do not insert or remove the sensor board while it is charged.
- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this operating instruction.
- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- Please contact our after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to this warranty.

Package Contents

M/SIS05.1*1 / Screw*2 / Datasheet*1

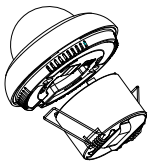


Figure 6

⇩1

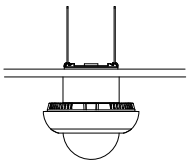


Figure 7

⇩2

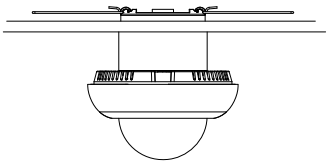


Figure 8

Figure 6 - 8. Spring clip mounting

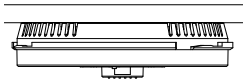


Figure 9

⇩1

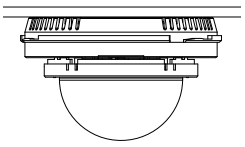


Figure 10

⇩2

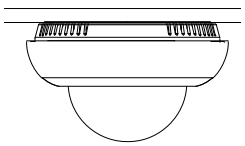


Figure 11

Figure 9 - 11. Screw mounting

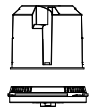


Figure 12

⇩1

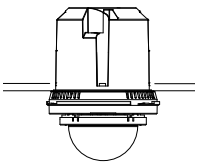


Figure 13

⇩2

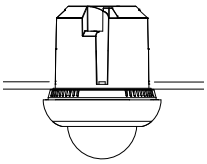


Figure 14

Figure 12 - 14. Wall box mounting

Technical Data

Basic Parameters	
Working voltage	21~30V DC
Working current	7mA/30V DC
Communication	KNX
Cable diameter of KNX terminal	0.6 - 0.8mm
PIR detection range	Φ12m (Installation height:3m)
External Environment	
Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%
Specifications	
Dimensions	Φ85×85 (mm)
Net weight	96g
Housing material	ABS, PC, iron
Installation	Spring clip mounting/Screw mounting/Wall box mounting (See Figure 6 - 8/Figure 9 -11/Figure 12 -14)
Protection rating (Compliant with EN 60529)	IP20
Approved	
CE, RoHS	
KNX	

KNX Cable Guide

KNX	KNX cable
-	Black
+	Red

Installation

Spring clip mounting - See Figure 6 - 8

Step 1. Rotate and fix the sensor and the spring clip together.
Step 2. Insert the spring clip into the hole. (diameter of the hole: 55mm)
Step 3. Fix the sensor into position with the assistance of the spring clips.

Screw mounting - See Figure 9 - 11

Step 1. Fix the sensor on the ceiling with screws.
Step 2. Install sensor board.
Step 3. Attach the cover to the sensor.

Wall box mounting - See Figure 12 - 14

Step 1. When installing the sensor in the thick wall , produce a hole in the wall.
Step 2. Install the wall box in the wall.
Step 3. Fix the sensor on the wall box with screws.
Step 4. Install sensor board.
Step 5. Attach the cover to the sensor.

Technical support
E-mail: hdltickets@hdlautomation.com
Website: https://www.hdlautomation.com