



Figure 1. KNX PIR Sensor

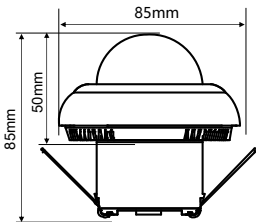


Figure 2. Dimensions - Front View

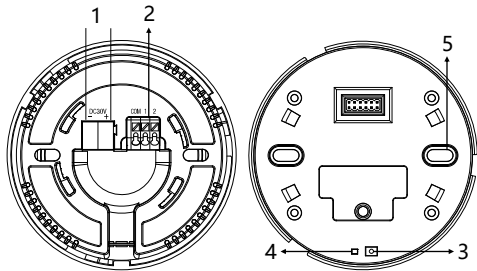
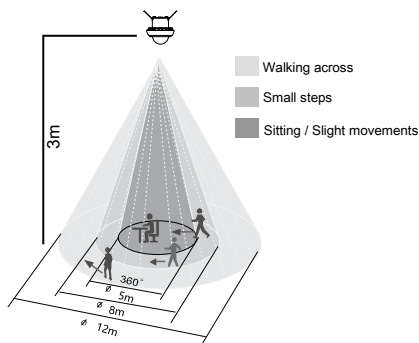


Figure 3. Components - Back View(1) Figure 4. Components - Back View(2)



Detection Range (25°C)

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

Figure 5. Detection Range

## Overview

KNX PIR 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 photo-sensitive 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, HVAC 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
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

## 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 PIR 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 PIR sensor board.
- Step 5. Attach the cover to the sensor.

## 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

- 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

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

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

### 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

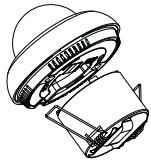


Figure 6

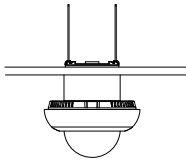


Figure 7

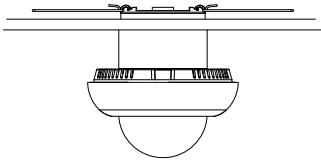


Figure 8

Figure 6 - 8. Spring clip mounting

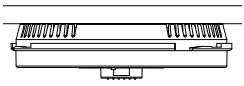


Figure 9

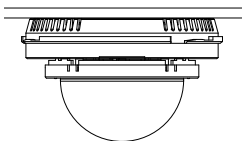


Figure 10

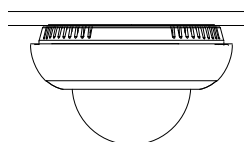


Figure 11

Figure 9 - 11. Screw mounting

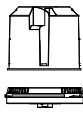


Figure 12

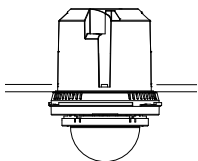


Figure 13

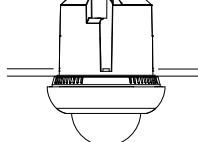


Figure 14

Figure 12 - 14. Wall box mounting

#### Technical support

E-mail: [support@hdlautomation.com](mailto:support@hdlautomation.com)

Website: <https://www.hdlautomation.com>

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