HDL®

M/WS05.1

KNX Wall Mount Outdoor Microwave Sensor

Hardware Version: A

KNX®

Datasheet

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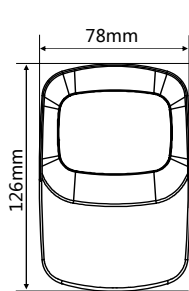Figure 1. KNX Wall Mount Outdoor Microwave Sensor
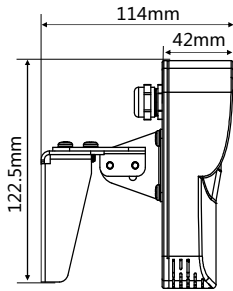

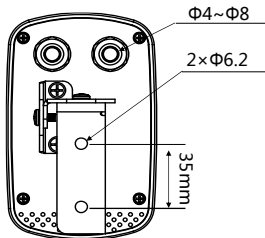Figure 2. Dimensions-Front View

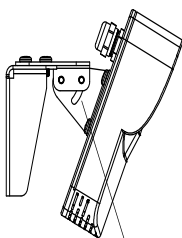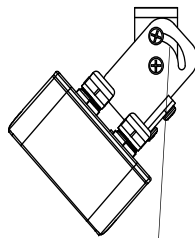
Figure 3. Dimensions-Side View

Figure 4. Dimensions-Back View

Adjustable range is ±25°

Figure 5. Adjustable Range in Upwards and Downwards

Adjustable range is ±45°

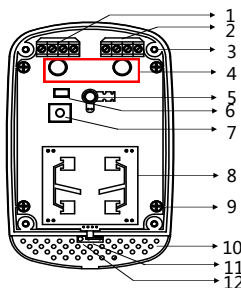Figure 6. Adjustable Range on Left and Right

Figure 7. Interior View

Overview

KNX Wall Mount Outdoor Microwave Sensor (See Figure 1) contains four independent logic blocks and one combined logic block. Supported input logical conditions include: Microwave sensing status, brightness value, temperature value, dry contact status and external telegram. The sensor can control lighting, curtain and threshold value.

Functions

- With 2CH constant brightness control function, the sensor supports 4 preset constant values and forced operation dimming.
- 5 logic blocks with 10 target output for each and supports dry contacts and external telegram locking/unlocking, or delay unlocking. Telegram locking/unlocking can be set to send on/off telegram.
- Control types: Switch control, Absolute dimming control, Curtain control, Alarm control, Percentage control , Sequence control, Scene control, String(14 bytes) control, Logic combination control.
- 5 logical condition sources: Microwave sensing status, brightness value, temperature value, dry contact status and external telegram.
- 2 logical relations: AND, OR
- 2 working modes: Single mode and Master & Slave mode.
- 2 dry contact input interfaces can wok as dry contact or LED indicators. The control types of dry contact target output can be set as switch, dimming and scene.
- The logic validity can be set through external telegram input.

Important Notes

- Installation - installed outdoor, be away from rain, or install shelter panels if needed.
- Programming - This device is compliant with the KNX standard and can only be programmed by ETS software.
- KNX Bus voltage - 21-30V DC.

Product Information

Dimensions - See Figure 2 - 4
Components - See Figure 5 - 6
Interior View - See Figure 7

1. KNX terminal
2. Dry contact terminal, from left to right: K2 GND GND K1
3. Screw hole
4. Wiring hole
5. Lux sensor
6. Indicator
7. Programming button
8. Microwave sensor
9. Screw for fixing PCB
10. Vents
11. Humidity sensor
12. Temperature sensor

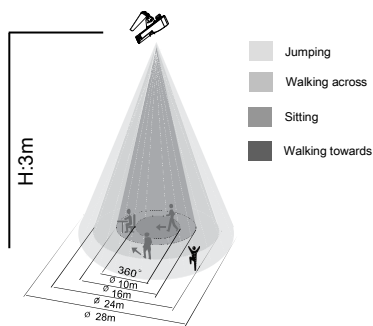**Microwave Detection Range - See Figure 8**

Installation - See Figure 9 - 11

Step 1. Fix the Wall Mount Outdoor Microwave Sensor on the bracket with screws.
Step 2. Install the sensor fixed on the bracket in an appropriate position with screws.

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/WS05.1*1 / Mounting bracket*1 / Screw(M4*6mm)*4 / Screw(M4*10mm)*2 / Screw(M6*50mm)*2 / Silica gel stopper*1 / Datasheet*1

| Jumping |
| Walking across |
| Sitting |
| Walking towards |

Detection Range (At 26℃)

Mounting height	Walking towards	Sitting	Walking across	Jumping
3m	10m	16m	24m	28m

Figure 8. Microwave Detection Range

Figure 9

⇩1

Figure 10

⇩2

Figure 11

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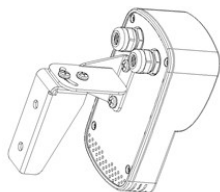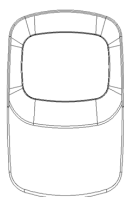
Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	20mA/30V DC
Communication	KNX
Cable diameter of KNX terminal	0.6 - 0.8mm
Microwave detection range	Φ28m (Installation height:3m)
Temperature detection range	-30℃~70℃
Humidity detection range	20~95%RH
Brightness detection range	0~15000LUX

External Environment

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

Specifications

Dimensions	126×78×114(mm)
Net weight	360g
Housing material	ASA, stainless steel
Installation	Wall mount (See Figure 9 - 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