

M/WS05.1 Wall Mount Outdoor Microwave Sensor
室外微波传感器

Hardware Version: A / 硬件版本：A



Datasheet

产品说明书

Issued: April 15, 2019

发布：2018年4月15日

Edition V1.0.0



Figure 1. Wall Mount Outdoor Microwave Sensor

图1. 室外微波传感器

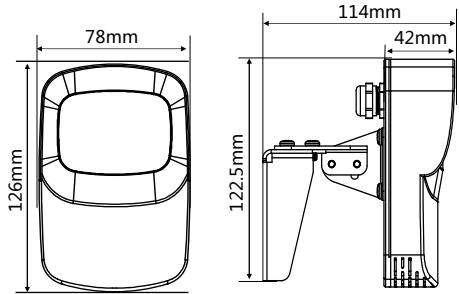


Figure 2. Dimensions-Front View

图2. 尺寸图-正面

Figure 3. Dimensions-Side View

图3. 尺寸图-侧面

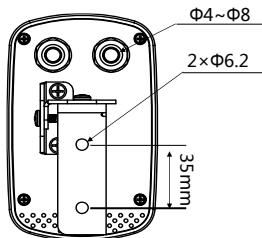


Figure 4. Dimensions-Back View

图4. 尺寸图-背面

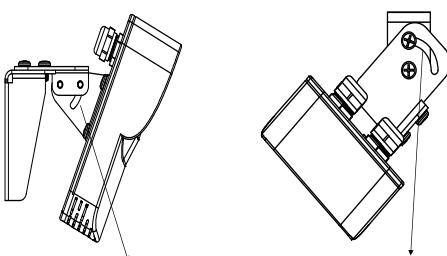


Figure 5. Adjustable Range in Upwards and Downwards
5. 上下可调节范围

Figure 6. Adjustable Range on Left and Right
6. 左右可调节范围

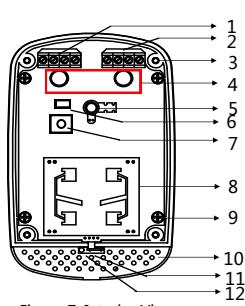


Figure 7. Interior View

图7. 内部图

Overview

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 work 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.
- The sensor can be set to automatic or semi-automatic mode.

Important Notes

- Installation - installed outdoor
- 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

Adjustable Range - 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

Product 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

- 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/WS05.1*1 / Mounting bracket*1 / Screw*2 / Datasheet*1

产品概述

室外微波传感器（见图1）包括4个独立的逻辑块和一个组合逻辑块。逻辑输入条件包括：微波感应状态、亮度值、温度值、干接点状态和外部报文，传感器可实现对灯光、窗帘、阈值等的控制。

功能说明

- 2通道恒照度控制功能，支持4个预设恒照度值和强制操作调光。
- 具有5个逻辑块功能，每个逻辑块可设置10个目标输出。支持干接点和报文锁/解锁，或延时解锁，锁/解锁可设发送开/关报文。
- 控制类型：开关控制、绝对值的调光控制、窗帘控制、警报控制、百分比控制、序列控制、场景控制、字符串（14字节）控制，逻辑组合控制。
- 5种逻辑输入条件：微波感应状态、亮度值、温度值、干接点状态和外部报文。
- 具有2个逻辑关系：与、或。
- 2种工作模式：单一模式和主从模式。
- 2路干接点输入接口，可做干接点或LED指示灯。干接点目标输出控制类型可设为开关、调光和场景。
- 外部报文可以改变逻辑的有效性。
- 可设置为全自动或半自动模式

注意事项

- 安装位置 - 室外安装
- 编程 - 本设备属于KNX标准设备，使用ETS软件进行编程
- 总线电压 - 21-30V DC

产品信息

产品尺寸 - 见图 2 - 4

可调节范围 - 见图 5 - 6

内部图 - 见图 7

- 1.KNX 端子
- 2.干接点端子，从左到右为 K2 GND GND K1
- 3.外壳螺钉孔
- 4.穿线孔
- 5.照度传感器
- 6.指示灯
- 7.模块编程按键
- 8.微波传感器
- 9.PCB固定螺钉
- 10.通风孔
- 11.湿度传感器
- 12.温度传感器

微波感应范围 - 见图 8

设备的安装 - 见图 9-11

步骤1. 用螺丝将室外微波传感器固定在支架上。

步骤2. 用螺丝将已固定在支架上的传感器安装在合适的位置。

安全警告

- 本设备的安装及调试工作必须由我司或我司指派的机构进行。其电气安装的计划和施工，必须遵守当地相关的安全标准和法规。
- 未按照本说明书进行安装及接线方式的，所造成的一切后果皆与我司无关。
- 请不要私自拆装或更换零部件，否则可能会导致机械故障、电击、火灾或身体伤害。
- 请将一切维修工作交由我司售后部门或指定机构进行，本产品的保修范围不适用于因用户拆卸产品而导致的故障。

装箱清单

M/WS05.1*1 / 安装支架*1 / 螺丝*2 / 说明书*1

EN

ZH

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°C~70°C
Humidity detection range	20~95%RH
Brightness detection range	0~15000LUX

External Environment

Working temperature	-5°C~45°C
Working relative humidity	≤90%
Storage temperature	-20°C~60°C
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	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 region where further investigation is necessary.

技术参数

基本参数

工作电压	21~30V DC
工作电流	20mA/30V DC
通信方式	KNX
KNX端子要求线径	0.6-0.8mm
微波感应范围	Φ28m (安装高度3m)
温度检测范围	-30°C~70°C
湿度检测范围	20~95%RH
亮度检测范围	0~15000LUX

外部环境

工作温度	-5°C~45°C
工作相对湿度	≤90%
储存温度	-20°C~60°C
储存相对湿度	≤93%

产品规格

尺寸	126×78×114(mm)
净重	360g
外壳材料	ASA，不锈钢
安装方式	螺丝固定安装 (见图9~11)
防护级别 (符合 EN 60529)	IP20

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
塑胶组件	o	o	o	o	o	o
五金铜件	o	o	o	o	-	-
螺丝组件	o	o	o	x	-	-
焊锡	x	o	o	o	-	-
PCB组件	x	o	o	o	o	o
IC	o	o	o	x	x	x

- : 表示不含有该有害物质。

o : 表示该有害物质在该部件所有均质材料中的含量均在IEC62321-2015规定的限量要求以下。

x : 表示需要进一步调查的区域。

KNX Cable Guide

KNX	KNX cable
-	Black
+	Red

KNX总线定义

KNX	KNX 电缆
-	黑
+	红

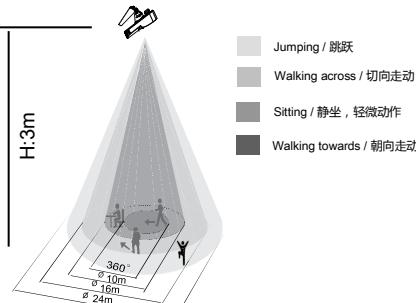


Figure 8. Microwave Detection Range / 感应范围 (At 26°C)

图 8. 微波感应范围

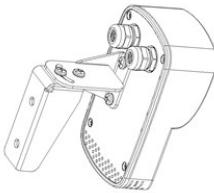


Figure 9 / 图 9

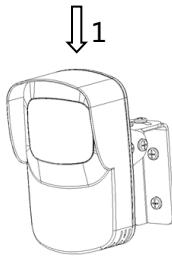


Figure 10 / 图 10

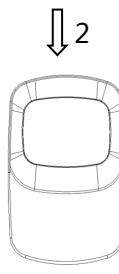


Figure 11 / 图 11

Figure 9-11. Installation
图 9-11. 安装图

技术支持

服务热线：020-85820195

(工作时间：9:00-12:00, 13:00-18:00, 星期一至星期五)

邮箱：kfb@hdlchina.com.cn

网址：<http://www.hdlchina.com>

Technical support

E-mail: support@hdlautomation.com

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