

HDL-MSOUT.4W
Wall Mount Outdoor Microwave Sensor

buspro

Datasheet

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Figure 1. Wall Mount Outdoor Microwave Sensor

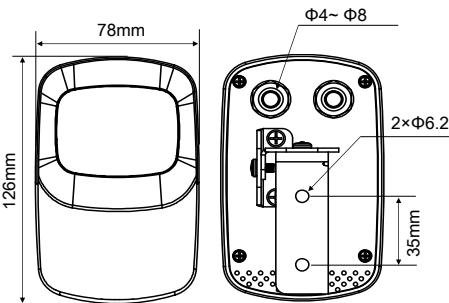


Figure 2. Dimensions - Front View

Figure 3. Dimensions - Back View

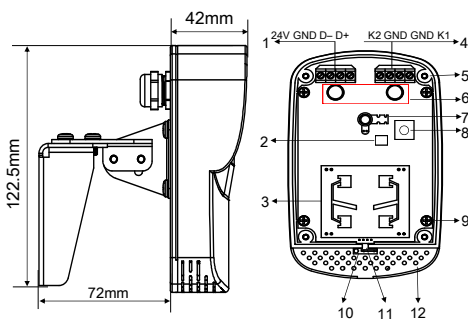
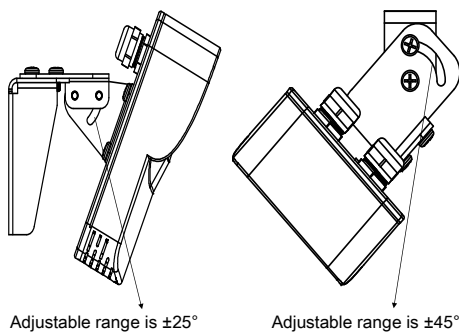


Figure 4. Dimensions - Side View

Figure 5. Components - Interior View



Adjustable range is $\pm 25^\circ$
Figure 6. Adjustable range upwards and downwards

Adjustable range is $\pm 45^\circ$
Figure 7. Adjustable range on left and right

Overview

Wall Mount Outdoor Microwave Sensor (See Figure 1) has various logic conditions, including LUX sensor, microwave movement sensor, humidity sensor, temperature sensor, dry contact, universal switch, etc. Internal logic makes certain arrangements of the conditions to form various logic functions in order to satisfy customers' requirements. It also supports HDL-Security mode.

Functions

- Built-in LUX sensor, microwave movement sensor, humidity sensor, temperature sensor, dry contact, universal switch.
- Two logical relations: OR, AND.
- 24 logic blocks: Either true logic or false logic can trigger the targets respectively. Each logic can set 20 targets.
- Adjustable microwave sensitivity between 1 to 100
- Each logic supports trigger delay time from 0 to 3600s.
- The range of universal switch number in logic is from 201 to 248, and each logic has 2 universal switch numbers. Universal switch can close automatically, and the time range is 1-3600s.
- Supports security function.
- The adjustable range of sensor angle in up-down direction is $-25^\circ \sim +25^\circ$, and in left-right direction is $-45^\circ \sim +45^\circ$.
- Sensor has heating function. When the temperature is below -5°C , it will heat until the circuits can work normally.
- Tamper-proof function.
- Supports online upgrading.

Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable.
- Buspro connection - Series connection (hand-in-hand recommended).
- Installation - Fix with screws.
- Check the connection, avoid any mistake.
- The angle of the sensor can be adjusted by a screwdriver.
- Installation position: Outdoor. Keep it away from AC outlet and heat source.
- To avoid unintentional triggering, the HDL Buspro cables should be fixed tightly when installing the sensor.

Product Information

Dimensions - See Figure 2 - 4

Components - See Figure 5

1. Buspro terminal, from left to right are: 24V GND D- D+
2. Indicator
3. Microwave sensor
4. Dry contact terminal, from left to right are K2 GND GND K1
5. Screw hole
6. Wiring hole
7. Lux sensor
8. Press the button for 3s, the address can be modified by HDL Buspro Setup Tool.
9. Screw for fixing PCB
10. Temperature sensor
11. Humidity sensor
12. Ventilation hole

Adjustable range - See Figure 6 - 7

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 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

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

Technical Data

Basic Parameters

Working voltage	12~30V DC
Working current	31mA/24V DC
Temperature detection range	-40°C~60°C
Illumination detection range	0~15000LUX
Humidity detection range	20~95%RH
Microwave detection range	Φ30m (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	126mm×78mm×42mm
Net weight	360g
Housing material	ASA, stainless steel
Installation	Screw fixation (See Figure 9 - 11)
Protection rating (Compliant with EN 60529)	IP54

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

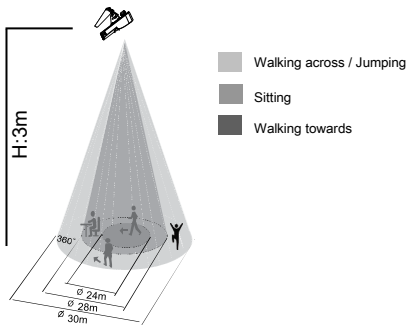
The symbol "-" indicates that the hazardous substance is not contained.

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.

HDL Buspro Cable Guide

HDL Buspro	HDL Buspro Cable	CAT5/CAT5E
DATA+	Yellow	Blue/Green
DATA-	White	Blue white/Green white
COM	Black	Brown white/Orange white
24V DC	Red	Brown/Orange



Detection Range (At 26°C)

Mounting height	Walking towards	Sitting	Walking across / Jumping
3m	24m	28m	30m

Figure 8. Detection Range

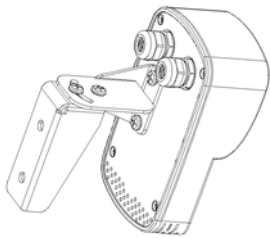


Figure 9



Figure 10

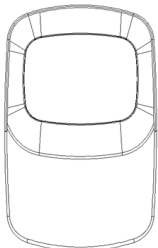


Figure 11

Figure 9 - 11. Installation

Technical support

E-mail: hdtickets@hdlautomation.com

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

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