

HDL-MSPU03-BRF.10

Wireless PIR & Lux Sensor

buspro
WIRELESS

Datasheet

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Figure 1. Wireless PIR & Lux Sensor

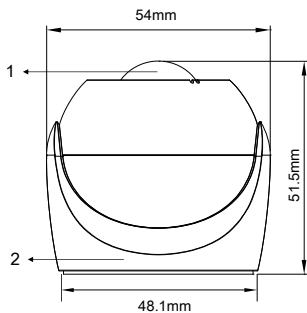


Figure 2. Dimensions - Side View

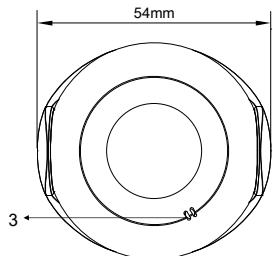


Figure 3. Dimensions - Front View

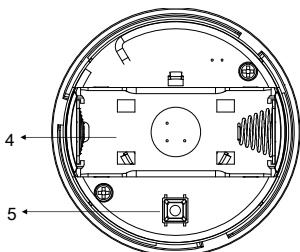


Figure 4. Component - Interior View

Overview

Wireless PIR & Lux Sensor (See Figure 1) enables human body detection, and trigger pre-set target once movement is detected. The sensor adopts HDL Buspro Wireless communication and the parameter can be set via HDL Buspro Setup Tool.

Functions

- Built-in infrared motion sensor, illuminance sensor, temperature sensor.
- Brightness detection.
- Temperature detection.
- Battery level detection.
- Timing broadcast function: sends own state when no target triggered, including infrared motion, brightness, temperature, battery level, broadcast content can be customized.
- 8 targets can be set up and not established. Target types include: invalid, scene, sequence, general switch, single channel adjustment, curtain switch, GPRS control, broadcast scene, broadcast loop, fire module, music player.
- Adjustable sensing area: the ball sensor can be rotated within the mounting base to adjust the sensing area.
- Supports IEEE.802.15.4, the standard wireless protocol
- Supports online upgrade
- Support for easy programming

Important Notes

- The sensor should work in conjunction with the mesh gateway.
- The subnet ID of the sensor must be the same as that of the mesh gateway.
- Keep the sensor away from air conditioning outlet, heat source and a large area of metal.
- When the battery level is below 2.8V, it needs to change the battery.
- Please ensure correct installation (positive/negative poles) of the battery.
- The parameters of the sensor can be set in the HDL Buspro Setup Tool.
- The indoor temperature should be 0-36 °C.

Product Information

Dimensions - See Figure 2 - 3

Component - See Figure 4

Detection Range - See Figure 5

1. Fresnel lens
2. The base can be fixed with screws or double faced adhesive tape. It can be used to adjust the detection area.
3. Temperature sensor
4. Battery case: for battery installation.
5. Programming button & LED indicator

After battery installation, the led indicator will turn green, then the sensor will enter the setup mode automatically.

In setup mode, keep pressing the programming button for 3s, the led indicator will turn red, and the device address can be read and modified via HDL Buspro Setup Tool. Keep pressing the programming button for 3s again or run without operation for 2 minutes, the sensor will exit the address setting mode.

In setup mode, keep pressing the programming button for one time, the green led will flash, after 20s, the led indicator will turn off and the sensor will enter the working mode.

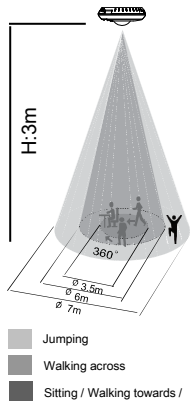
In setup mode, keep pressing the programming button for 3 times continuously, the green led will flash quickly, the sensor will enter setup mode. And the gateway should also enter the setup mode. Then they will connect together automatically.

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

HDL-MSPU03-BRF.10*1 / Battery(CR123A)*1/Double faced adhesive tape*1/Screw*1/PE plastic expansion tube*1/ Datasheet*1



PIR Detection Range (At 31°C)

Mounting height	Sitting / Walking towards	Walking across	Jumping
3m	3.5m	6m	7m

Figure 5. Detection Range

Technical Data

Basic Parameters

Working voltage	3V DC 1400mAh (From battery)
Working current	21mA
Standby current	24μA
PIR detection range in diameter	7m (Installation height: 3m)
Communication	Buspro Wireless
Wireless transmission power	+10dbm
Wireless sensitivity	-90dbm
Indoor communication distance	≤30m
RSSI (Received Signal Strength Indication)	>-80dbm

Frequency Allocation

WPAN (China)	780 to 786MHz
SRD (Europe)	864 to 870MHz
ISM (North America)	904 to 928MHz
Default PSK	HDL-SecurityKey0

External Environment

Working temperature	0°C~36°C
Working relative humidity	≤90%
Storage temperature	-20°C~60°C
Storage relative humidity	≤93%

Specifications

Dimensions	54x54x51.5 (mm)
Net weight	125g
Housing material	PC
Installation	Ceiling mount
Protection rating (Compliant with EN60529)	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.

Technical support

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