



Figure 1. Wireless PIR & Lux Sensor
图 1. 无线红外移动传感器

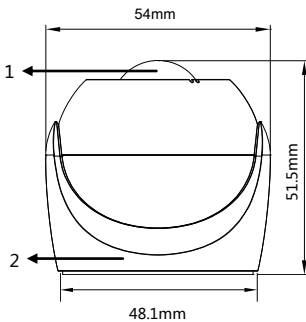


Figure 2. Dimensions - Side View
图 2. 尺寸图 - 侧面

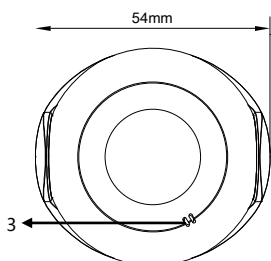


Figure 3. Dimensions - Front View
图 3. 尺寸图 - 正面

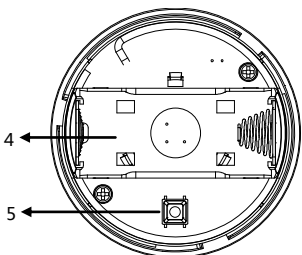


Figure 4. Component - Interior View
图 4. 部件 - 内部图

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

Back View - See Figure 4

Wiring - 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-MSPU05-RF.1C*1 / Battery(CR123A)*1/Double faced adhesive tape*1/Screw*1/ PE plastic expansion tube*1/Datasheet*1

产品概述

无线红外超声波传感器(见图1)通过红外感应检测人体移动,当检测到有人时,会触发条件成立时设置的目标,在一定时间内没有检测到,则会触发条件不成立时的目标。传感器采用HDL Buspro wireless 通讯方式,通过HDL Buspro配置软件进行参数设置。

功能说明

- 内置红外移动传感器、照度传感器、温度传感器。
- 亮度检测。
- 温度检测。
- 电池电量检测。
- 定时广播功能:无触发状态定时发送本身状态,包括红外状态,亮度,温度,电池电量,具体广播内容可以选择设置。
- 成立与不成立均可设置8个目标,目标类型包括:无效,场景,序列,通用开关,单路调节,窗帘开关,GPRS控制,广播场景,广播回路,消防模块,音乐播放。
- 感应区域可调:球体传感器可以在安装底座内旋转,从而调整感应区域。
- 无线部分支持标准协议 IEEE.802.15.4
- 支持在线升级
- 支持简易编程

注意事项

- 该设备需与无线网关配合使用
- 该设备子网段必须与无线网关的子网段及通讯参数相同
- 避免放置在大面积金属,远离空调出风口,远离热源
- 当检测到电池电量小于2.8V时需要更换电池。
- 电池正负极不能装反。
- 参数配置需在HDL Buspro软件中设置。
- 请保持温度于0-36摄氏度范围内(在这个温度范围内红外传感器才能正常工作)。

产品信息

产品尺寸 - 见图 2 - 3

背面图 - 见图 4

接线图 - 见图 5

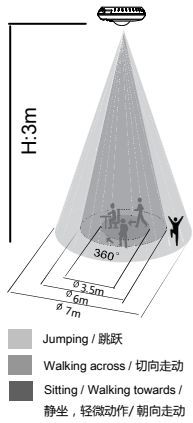
1. 菲涅尔透镜
2. 安装底座,可用螺丝固定底部螺丝孔,也可将双面胶粘贴在底部,起到安装固定的作用。它也可用于调整检测区域。
3. 温度传感器,测量温度
4. 电池座,装入电池,注意电池正负极不要装反
5. 编程按键&指示灯
传感器安装电池后,绿灯常亮,此时为配置模式
在配置模式下,长按编程按键3S,红灯长亮,可以在HDL Buspro软件中读取及修改该设备的地址。再长按3S或2分钟无操作退出地址设置。
在配置模式下,按键1次,绿灯开始闪烁,20秒后绿灯熄灭,进入工作模式。
在配置模式下,按键连续按3次,绿灯快速闪烁,进入频率配置模式,同时无线网关进入频率配置模式即可完成频率配置。

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 and 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,本产品的保险范围不适用因用户拆卸产品而导致的故障。

装箱清单

HDL-MSPU05-RF.1C*1 / 电池(CR123A)*1/ 双面胶*1/ 螺丝*1/PE塑料膨胀管*1/说明书*1



PIR Detection Range / PIR感应范围 (At 31°C)

| Mounting height / 安装高度 | Sitting / Walking towards / 静坐, 轻微动作/ 朝向走动 | Walking across / 切向走动 | Jumping / 跳跃 |
|------------------------|--|-----------------------|--------------|
| 3m | 3.5m | 6m | 7m |

Figure 6. Detection Range
图 6. 感应范围

EN

Technical Data

Electrical 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 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.

ZH

技术参数

电气参数

| | |
|------------|---------------------|
| 工作电压 | 3V 1400mAh (电池供电) |
| 工作电流 | 21mA |
| 待机电流 | 24μA |
| 红外感应直径 | 7m (安装高度3m) |
| 通信协议 | Buspro wireless |
| 无线发射功率 | +10dbm |
| 无线接收灵敏度 | -90dbm |
| 室内通讯距离 | ≤30m |
| RSSI接收信号强度 | >-80dbm |

无线中心频率

| | |
|------|--------------------|
| 中国 | WPAN 频段 780至786MHz |
| 欧洲 | SRD 频段 864至870MHz |
| 北美 | ISM 频段904至928MHz |
| 默认密码 | HDL-SecurityKey0 |

外部环境

| | |
|--------|------------|
| 工作温度 | 0°C~36°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 | 54x54x51.5 (mm) |
| 净重 | 125g |
| 外壳材料 | PC |
| 安装方式 | 吸顶安装 |
| 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 | o | 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 : 表示该有害物质至少在该部件的某一均质材料中的含量超出IEC62321-2015规定的限量要求。

技术支持
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