



EDQ255

Product description

- Illumination detection function
- Human movement\presence detecting function
- Sensing range of sensor is adjustable (4 levels is available)
- Networking function with master-slave sensor control
- Illumination sensing function of 3 data output types, and its value can be sent circularly
- Induction function of 3 data output types, values can be sent circularly
- With on/off indicator function
- Threshold (setting) function
- Disable illuminance and movement functions

Electrical properties

Input voltage	12-30Vdc
Working current	≤50mA @24V DC
Operating power consumption	≤1.2W
Communication code	KNX bus communication
Transmission frequency	24-24.25GHz
Transmission power	15dBm (max)
Movement sensing range	1.5-4m
Preaence sensing range	1-3m
Illumination	0-65535LUX
Delay	10-7200s
Working temperature	-5°C...+45°C
Storage temperature	-25°C...+55°C

Remarks

- 1、 The test distance range is based on the sensor hanging height of 3M and indoor environment test. The tester is 170cm tall, weighs 65-75kg, and walks at a speed of 1m/s (2 steps in 1 second). Different installation scenarios may cause range changes, and the actual test shall prevail;
- 2、 Due to the spectral characteristics of photosensitive devices, the threshold is tested under natural light conditions;
- 3、 The customer can set the delay time through the remote control according to the demand, with the delay tolerance of $\pm 10\%$.

Typical application products

Ceiling mounted , scene



Office lighting



Smart home lighting

Indicator state

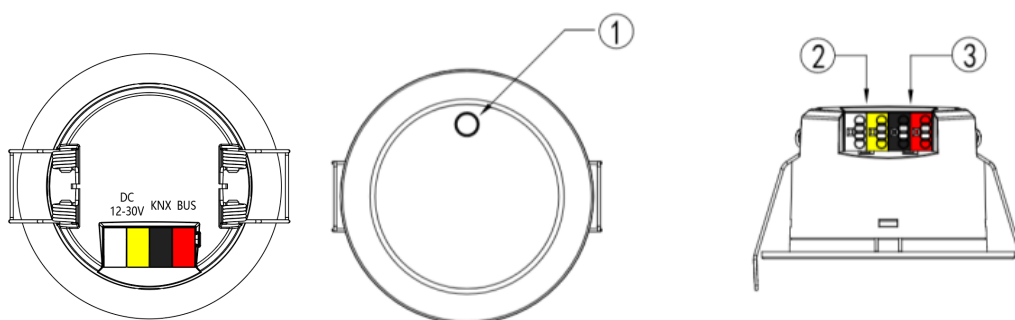
1、Initialization : Power on——LED indicator lights on and flashes for 10s——after the light is red ——LED indicator turns off——the device enters the normal working state.

2、Working mode : the sensors' indicator light flashes once when someone detected ,it sends signals that there is someone to the bus. After the delay ends,it sends signals that there is no one to the bus.

3、Programming mode: briefly press programming button, LED lights red and keep on, the device is in programming mode.

Note: When the movement is triggered multiple times within 5 seconds, the indicator light flashes only once.

Operation introduction



① illumination sensor key is integrated with program :

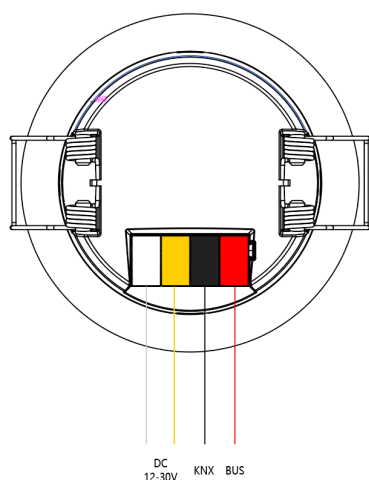
LED green light flashes : Indicates that the radar detects someone

LED red light keeps on:the device is in the programming mode

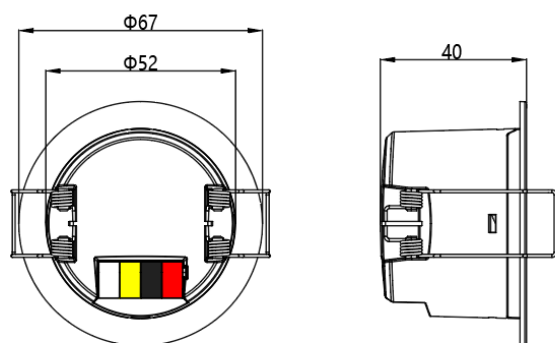
②12-30V auxiliary supply terminal

③KNX bus connection terminal

Wiring diagram and instruction

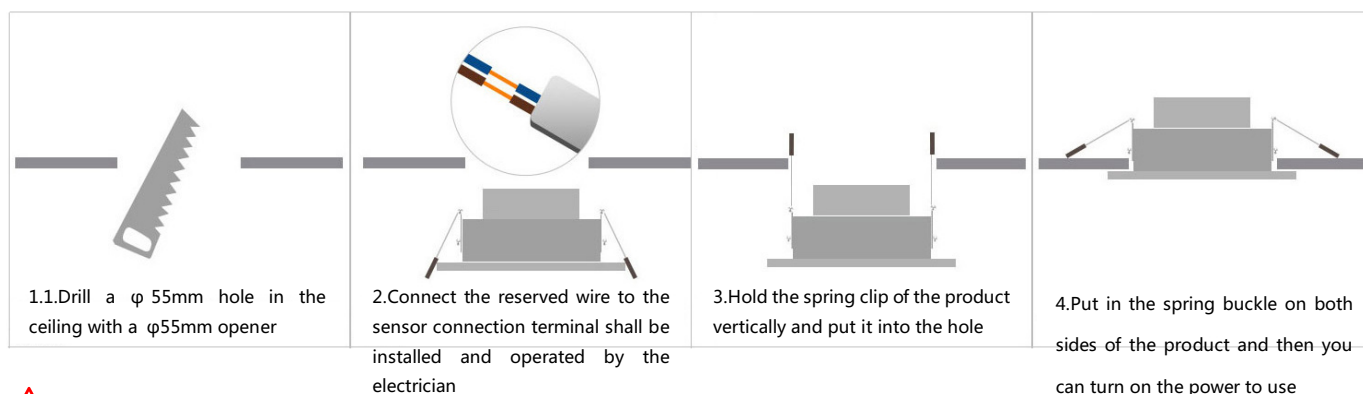


Product size



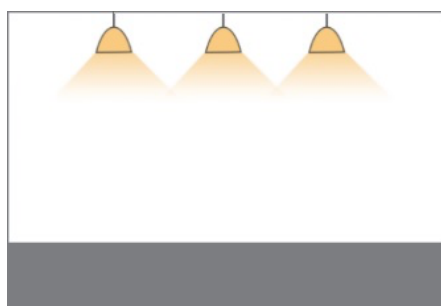
EDQ255 product size unit : (mm)

Installation instruction

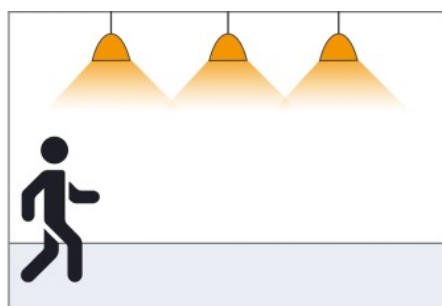


⚠ Power supply must be turned off before installing or removing.

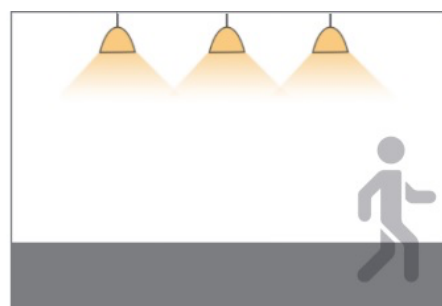
Function introduction



No moving objects detected, luminaire goes to off state



When the sensor detects a moving object, the light will automatically turn on and enter the set delay time, if the human body movement is detected



After the delay time it returns to the off state when the sensor does not detect a moving object.

The sensor detects human body movement, micro-movement and presence signals, realizing the detection of human presence in non-sleeping state.

Movement signals: in the detection area, the human body in the walking state or limb movement amplitude generate relatively large signal.

Micro-motion signals: in the detection area the human body in a standing or sitting state, hands or shoulders generate slight shake of the small amplitude of the action signal.

Presence signal: the human body is in a standing or sitting state, the detection of human respiratory vital signs caused by abdominal cavity, chest expansion behavior action.

Attentions

1, When installed, the distance between exhaust fan and air conditioning vents shall more than 50cm. Vibration generated by exhaust fans, air conditioning vents and other equipment work create false triggers. Installation also needs to avoid areas where there are vibrations caused by the activities of people or objects in the outside world.

2, The product has good penetration effect on plastic and wood, which should be taken in consideration when installing the sensor. Avoiding metal covering in front of the antenna, the metal will reflect the microwave and affect the actual sensing effect;

Area metal, which reflects microwaves and may cause the sensor to self-trigger;

3, Within the sensor detection range, when the decorative surface has a large area of glass and smooth ceramic tile, the electromagnetic wave reflection will be strengthened, and should be appropriately adjusted according to the size of the space.

4, The distance between multiple sensors in the same site application should be greater than 2.5m. Too close installation distance may false trigger some cycle.

5, Microwave sensors emit electromagnetic waves in the actual application of the environment, the reflectivity of the obstacles will bring different sensing range, which is a normal phenomenon; For example, in a hallway and a wide room, the sensing distance will be slightly different.

6, Product specifications, parameters may be upgraded version without prior notice.

Product Naming Rules

ED	Frequency	Product	Segment	Product	Feature	Delay	Serial
ED	Band	Categories	Categories	Number	-	Y	Numb
	Q	2	5	4			er
							01
	<input type="checkbox"/> S 3GHz	<input type="checkbox"/> 1 Microwave sensor	<input type="checkbox"/> 0 Ultra Low Power Series	0-9 , A-Z	<input type="checkbox"/> A VOG (default)	<input checked="" type="checkbox"/> Y With photosensitive	
	<input type="checkbox"/> F 6GHz	<input checked="" type="checkbox"/> 2 Microwave switch	<input type="checkbox"/> 1 Flagship Series		<input type="checkbox"/> B VGO	<input type="checkbox"/> N Without photosensitive	
	<input type="checkbox"/> C 5.8GHz	<input type="checkbox"/> 3 Radar antenna	<input type="checkbox"/> 2 Short distance series			<input type="checkbox"/> P Programmable	
	<input checked="" type="checkbox"/> Q 24GHz	<input type="checkbox"/> 4 MCU	<input type="checkbox"/> 3 Adjustable series				
	<input type="checkbox"/> V 60GHz	<input type="checkbox"/> 5 Microwave power supply	<input type="checkbox"/> 4 External Antenna Series				
	<input type="checkbox"/> W 77GHz	<input type="checkbox"/> 6 IC	<input checked="" type="checkbox"/> 5 General series				
	<input type="checkbox"/> X 10.5GHz	<input type="checkbox"/> 7 other	<input type="checkbox"/> 6 To be defined				
		<input type="checkbox"/> 8 Networking	<input type="checkbox"/> 7 To be defined				
			<input type="checkbox"/> 8 Basic Series				
			<input type="checkbox"/> 9 High Altitude Series				

Configuration Version Description

【Hardware】：

【Software】：

Historical Revision Record

Edition	Time	Description	Remark
V0.1	2023-09-26	First version	-