



EDQ286

## Product Description

- 24GHz Weak Power Dry Contact Sensor
- 12-24V DC input, weak power dry contact output
- Small size, support embedded stand-alone installation (opening  $\Phi 45\text{mm}$ )
- Adopt human body detection technology, support movement, micro movement and presence detection
- 24G strong anti-interference antenna, can effectively resist wifi, bluetooth and other kinds of wireless signal interference

## Electric performance

Input Voltage	12-24Vdc
Operating current	DC 12V-75mA max. DC 24V-40mA max.
Standby power consumption	$\leq 0.6\text{W}$ @24V DC
Output mode	Passive dry contact
Dry contact load	36V, 50mA max.
Transmit Frequency	24-24.25GHz
Transmit power	$\leq 15\text{dBm}(\text{max})$
Optical threshold	5lux, 15lux, 30lux, 50lux, 100lux, 150lux, disable
3db beam angle	79.8° (XZ plane) 72.7° (YZ plane)
Motion Sensing Distance	1.5-4m
Presence detection distance	1-3m
Delay time	10s~30min (remote control adjustable)
Operating temperature	-30... + "60°C
Storage temperature	-35... + "85°C

Remarks:

- 1, the test distance range is based on the sensor hanging height 3m, indoor environment test, tester height 170cm, weight 65-75kg, walking speed 1m/s (1 second 2 steps), different scene installation may cause the range of changes to the actual test shall prevail;
- 2, due to the spectral characteristics of the photosensitive device, the threshold is unified in the natural light conditions for testing;
- 3、Customers can set the delay time through the remote control according to demand, delay tolerance  $\pm 10\%$ .

## Typical Application Products

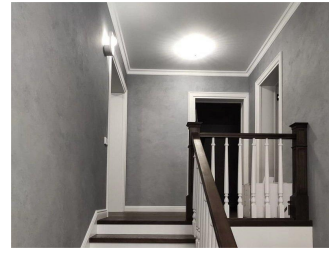
### Ceiling Mount, Scene



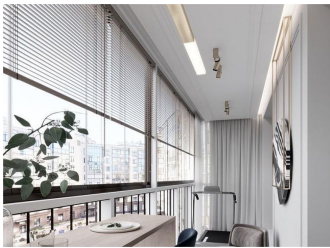
office



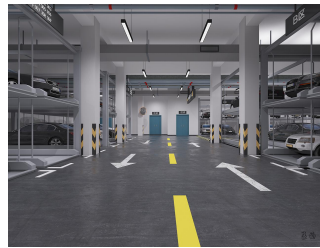
front door



staircases



verandahs



cellar

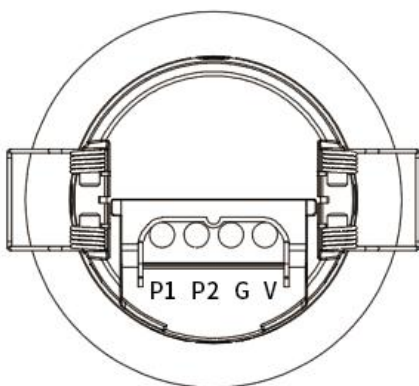
## Indicator status

1、Initialization:the dry contact is closed when power on, the LED indicator light is on, after initialization, the LED indicator light is off and the dry contact is disconnected.

2、 Working Mode: If a person is detected, the LED indicator flashes slowly once, and the dry contact is closed at this time. If no person is detected after the delay, the dry contact is disconnected.

Note: When the movement is triggered several times within 5 seconds, the indicator light will flash only once.

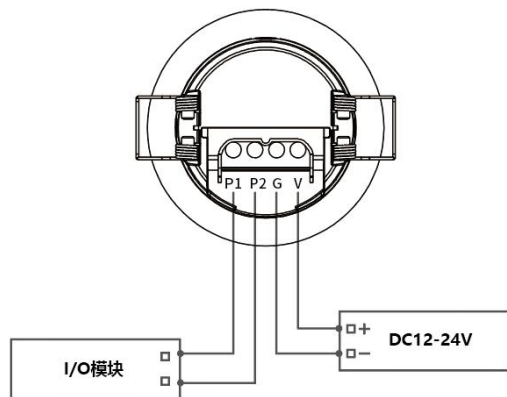
## Wiring Description



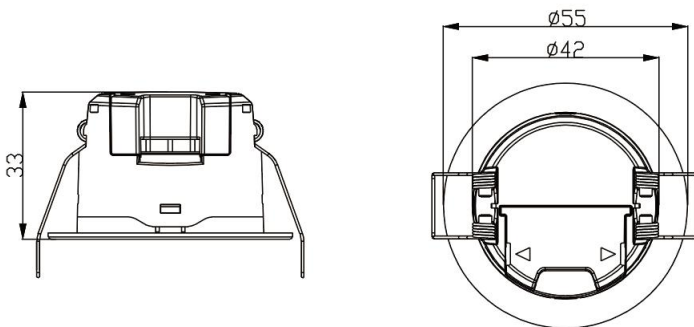
### EDQ286 Wiring Description

PIN	Description
P1	Dry contact (non-polarized)
P2	
G	GND
V	DC 12-24V supply

## Wiring Schematic

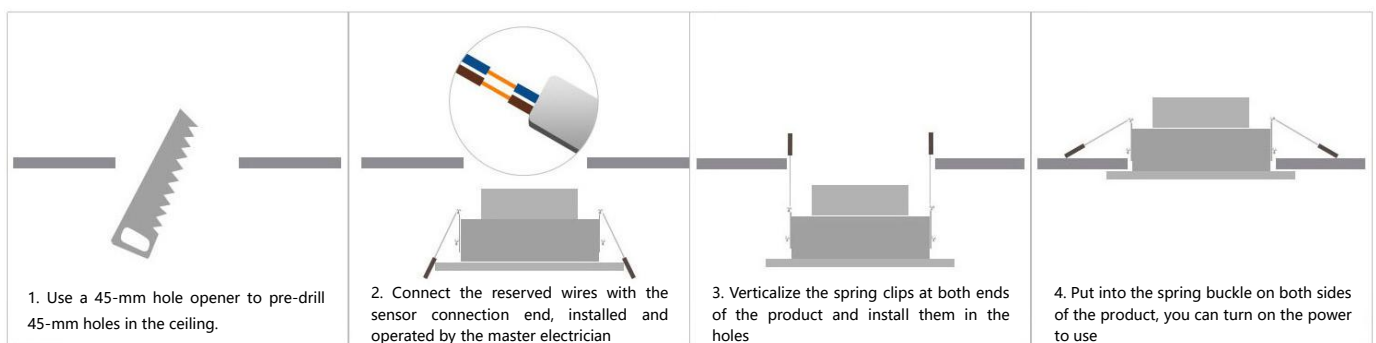


## Product size chart



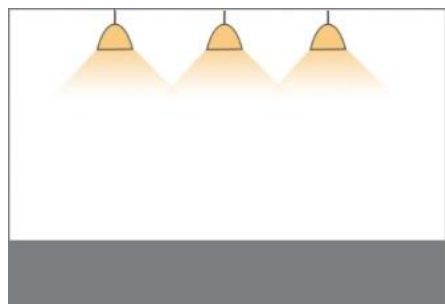
EDQ286 Dimensional Drawing Unit: (mm)

## Installation Instructions

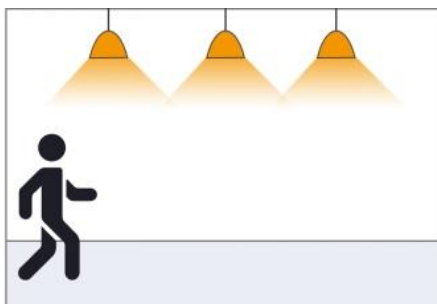


**!** NOTE: Power must be turned off before installation or removal.

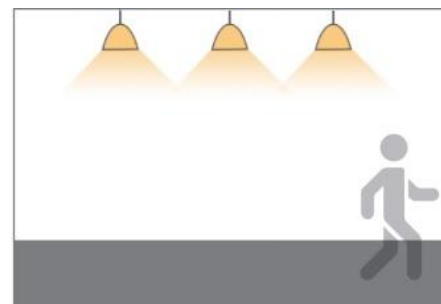
## function declaration



If the moving object cannot be detected, the lamp is turned off



When the sensor detects a moving object, the light will automatically turn on and enter the setting delay time. If the human body exists or a moving object is detected, the delay will be extended



After the delay time, the sensor can not detect the moving object or the presence of the living body, and return to the closed state

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

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

Micro-motion signals: the human body in the detection area in a standing or seated state, hands or shoulders to produce a slight swaying micro-amplitude movement signals, such as: the body leaning forward, backward, limb swaying, shaking his head, typing, playing the phone and other micro-amplitude behavioral actions.

Existence of signals: the human body in a standing or sitting state, the detection of human respiratory vital signs caused by (abdominal and thoracic cavity expansion behavior).

## Precautions

1, the product should be installed with the exhaust fan and air conditioning vents to maintain a distance of more than 50CM, exhaust fans, air conditioning vents such equipment work generated by Vibration will form a false trigger on the sensor detection, long time can not enter no one. Installation also need to avoid outside people or things caused by vibration when the activities of the region.

2, the product has a certain degree of penetration of thin wood, glass material, the installation of the distribution point should take into account these two factors. At the same time to avoid the sensor in front of a large area of metal, metal will reflect microwaves.

Area of metal, metal will reflect microwaves, may lead to sensor self-excitation;

3, the sensor detection range, the decorative surface has a large area of glass and smooth tiles, electromagnetic wave reflection will be strengthened, should be appropriate according to the size of the space to reduce the sensing

Should be appropriately adjusted according to the size of the space to reduce the sensing range.

4, a number of sensors in the same site application, recommended product installation spacing greater than 2.5 m. Installation distance is too close may trigger individual cycle false alarms;

5, microwave sensors emit electromagnetic waves in the actual application of the environment, the different reflectivity of the obstacles will bring about different sensing range, which is a normal phenomenon;

For example, in the corridor and a wide room, the sensing distance will have a slight difference.

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

## Product naming rules

ED	frequency	Product	Product	identification	characteristic	Time delay	serial
ED	range	categories	subdivision	of product		time	number
	Q	2	8	6	-		
	<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 has a sensitive light	
	<input type="checkbox"/> F 6GHz	<input checked="" type="checkbox"/> 2. Microwave induction switch	<input type="checkbox"/> 1 Flagship series		<input type="checkbox"/> B VGO	<input type="checkbox"/> N no light sensitivity	
	<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 Single chip machine	<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 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 checked="" type="checkbox"/> 8 Basic series				
			<input type="checkbox"/> 9 High altitude series				

## Configuration version description

[Hardware]: V1.0

[software]:

## Historical revision records

Edition	Time	Description	remarks
V1.0	2023-09-05	First Edition	-