

EDQ18KA Specification

24GHz Basic Series Modules



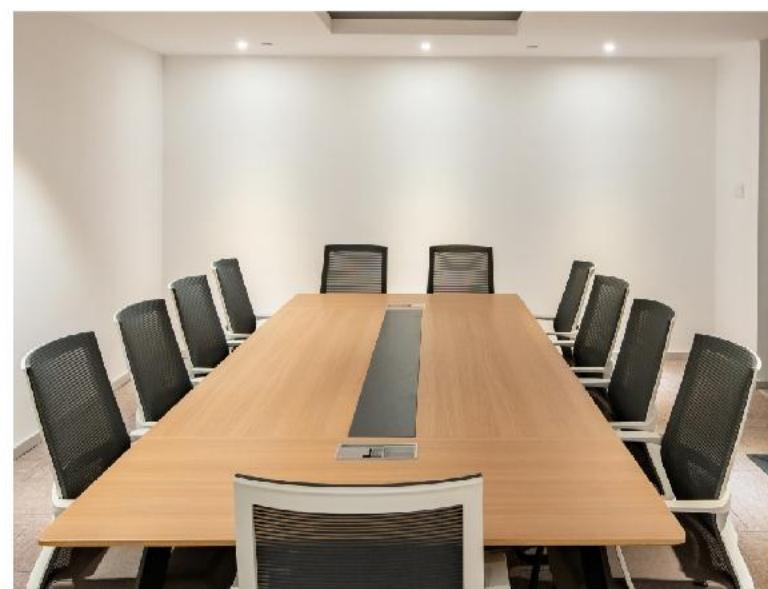
Product Features

- 24GHz millimeter wave band, centimeter-level high-precision sensing
- One transmitter and two receivers antenna design, precisely defined sensing boundaries, no out-of-bounds interference
- High sensitivity breath detection, sense when a person is in the sensing area.
- Support serial port online upgrade program firmware

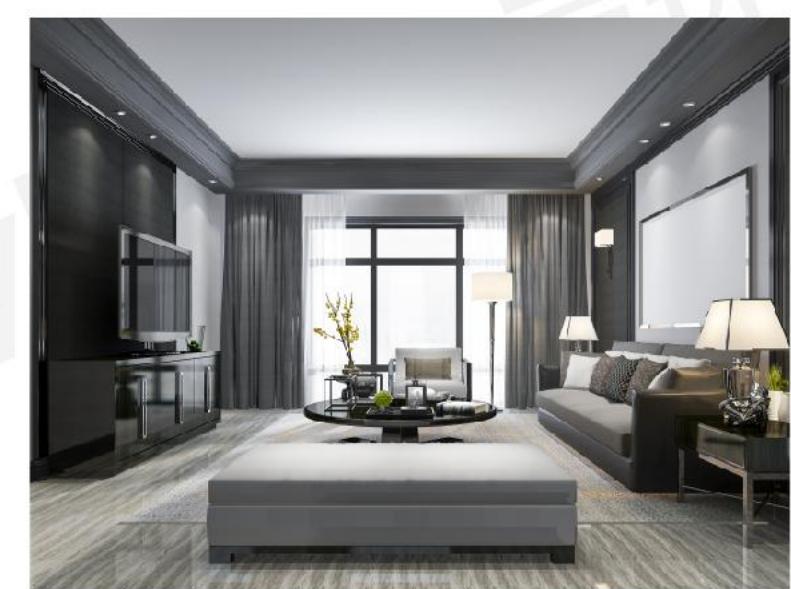
Application Scenarios/Products



Smart Hotels



Office Lighting



Smart Home



panel light



ceiling lamp



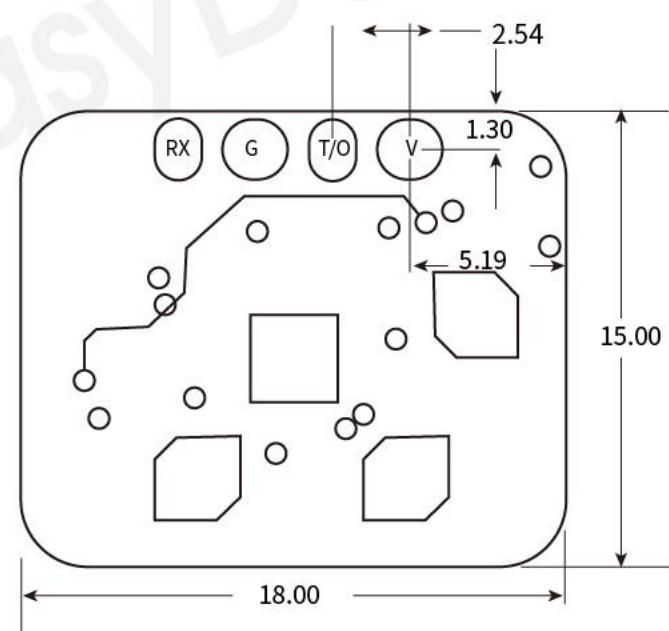
T-tube lamp



educational lighting

Product Dimension Drawing

尺寸单位:mm



Pin Description

Pinout	Description
V	5~8V DC input
T/O	Serial send/3.3V DC output
G	GND groundings
RX	Serial port reception

EDQ18KA Dimensional tolerance: ± 0.2
Welding hole of the row of pins: $\phi 0.9$

⌚ Electrical Parameters

Input Voltage	5-8V
Operating Current	35-45mA
Operating frequency	24-24.25GHz
3dB Beam Angle	97° (XZ plane) 99° (YZ plane)
Power Consumption	<0.5W

⌚ Functional Parameters

① Conventional sensing radius	4-6m
Hanging height	3m
Delay Time	10s±1s
Distance accuracy	±20cm
Angular accuracy	±10°
Detection angle	±15°

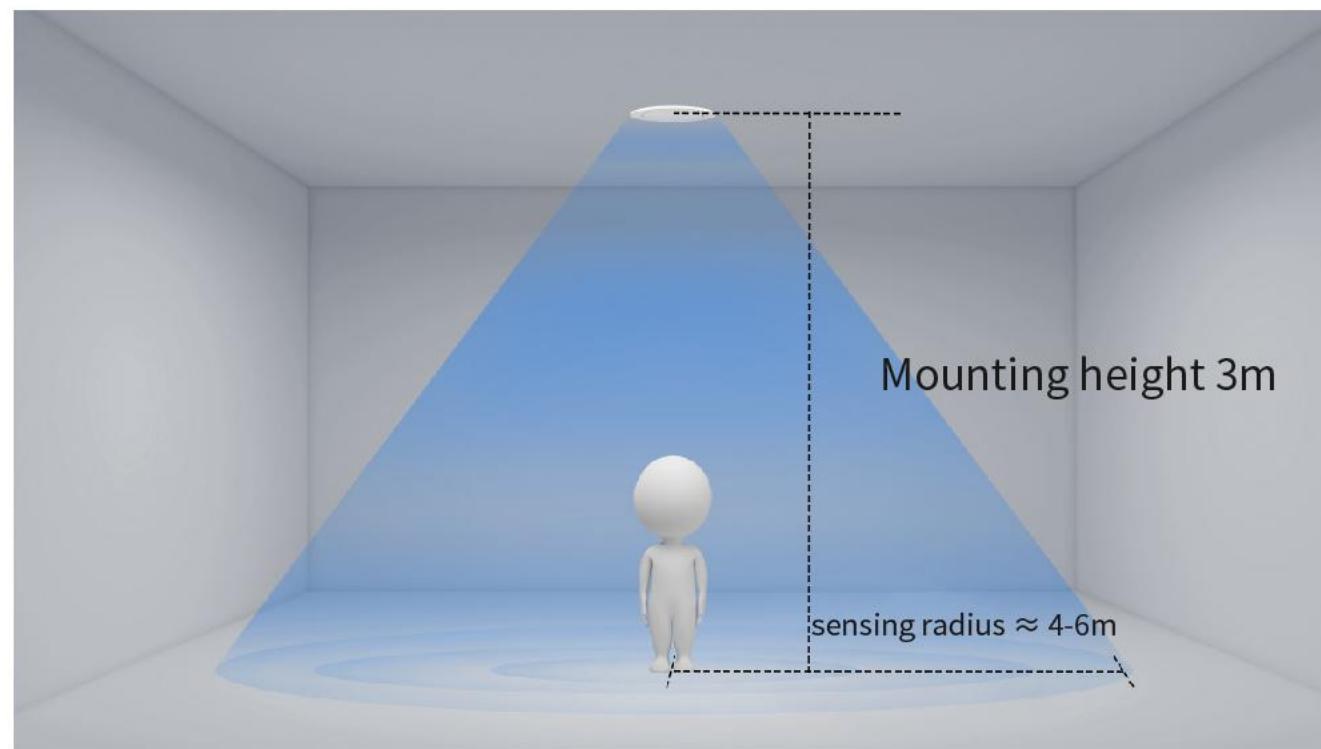
⌚ Output Parameters

Output Voltage	3.3V
Output Signal	UART/IO

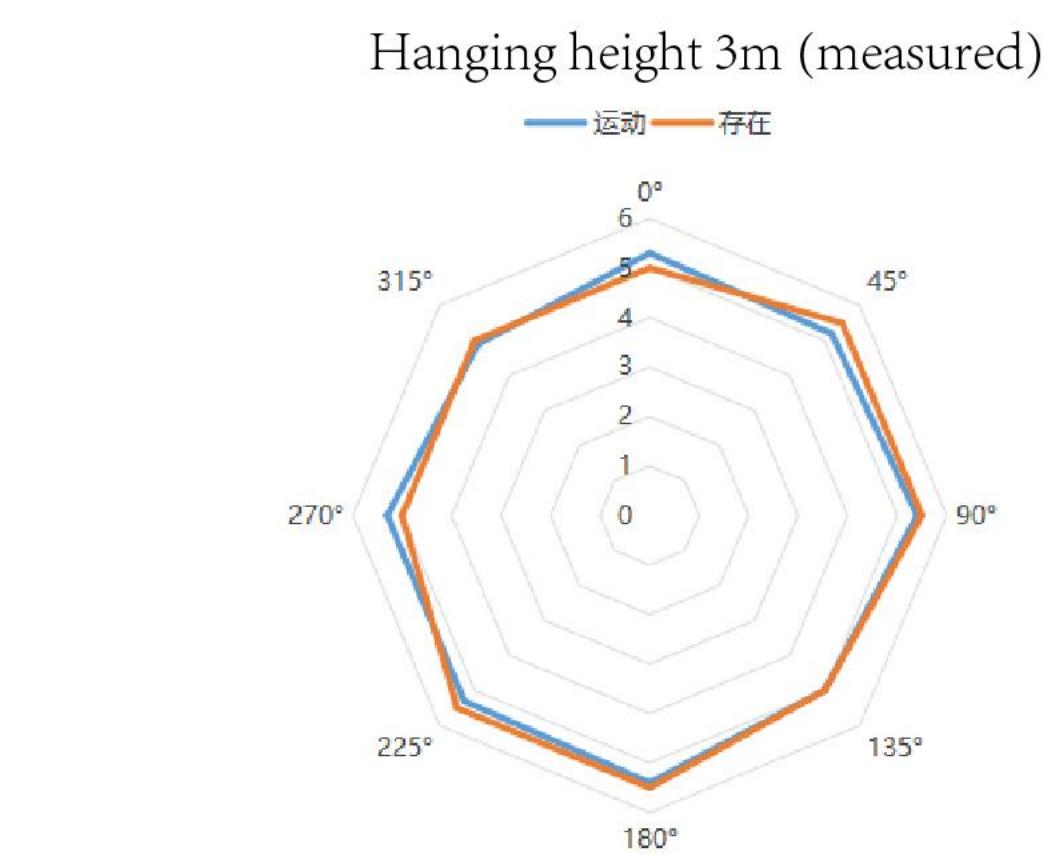
⌚ Environment & Lifespan

Operating Temperature	-20~+85°C
Storage Temperature	-20~+105°C

⌚ Detection Schematic



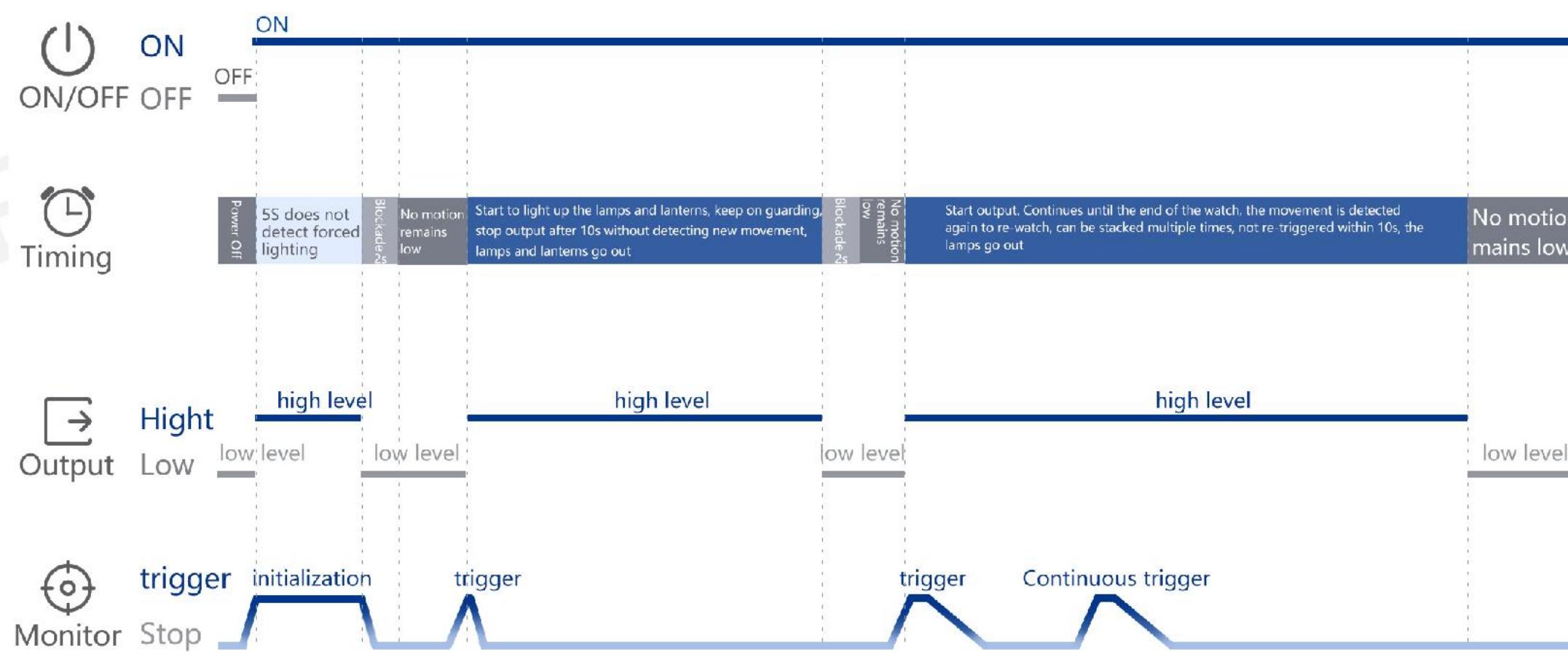
⌚ Schematic diagram of sensing range①



Remarks:

①The test distance range is based on the sensor hanging height of 3m, indoor installation environment test, the height of the test person 170cm, weight 65-75kg, walking speed of 1m/s, the test person's height 170cm, weight 65-75kg, walking speed 1m/s. Different scenarios may cause changes in the range of installation, subject to the actual test.

时序图



Product Naming Law

ED	Frequency Band	Product Categories	Product Subdivision	Product Number	Delay Time	Serial number
ED	Q	1	8	KA		
EasyDetek	C 5.8GHz	1 Microwave sensor module	0 Ultra-low-power series	0-9, A-Z	Y Has light sensor	
	X 10.5GHz	2. Microwave radar switch	1 Flagship series		N no light sensor	
	Q 24GHz	3 Radar antenna	2 Short-distance series		P programmable	
	V 60GHz	4 MCU	3 Adjustable series			
	W 77GHz	5 Microwave power supply	4 External antenna series			
		6 IC	5 General Series			
		7 Other	6 To be defined			
		8 Networking	7 To be defined			
			8 Basic series			
			9 High altitude series			

Configuration Version Description

【material number】: EDQ18KA

【hardware】: EDQ18KA-VA

【software】: software ID: 75D0

Historical Revision Record

Version	Time	Description	Note
V1.0	2025-05-14	First edition	-

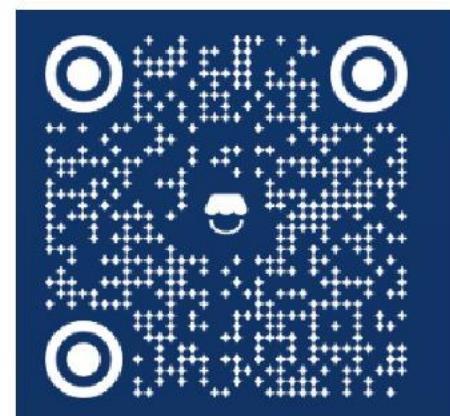
⌚ Precautions

1. When installing the radar sensor, if there is an aluminum substrate or other metal plate on the back, it should be raised to a certain height and kept at a distance of more than 5mm from the metal plane. It should not be close to or in contact with the metal plane; there should be no metal shielding or high-current cable covering in front of the radar sensor antenna, avoid facing the driving power supply, and try to stay away from the driving power supply's rectifier bridge, transformer, switch tube and other high-power devices.
2. The radar sensor has a good penetration effect on plastic and wood materials, but cannot penetrate metal or metal-coated materials. If the shell of the user's product is made of special materials such as glass, ceramic, carbon fiber, etc., please refer to the actual measured effect. If necessary, please contact Easydetek Technology's technical personnel for applicability debugging.
3. Excessive power ripple may interfere with the radar sensor and cause false alarms. It is recommended that the power supply ripple should be less than 100mV.
4. When multiple radar sensors are used in the same venue, the installation distance is too close, which may cause individual radar sensors to generate false alarms. It is recommended that the product installation distance is greater than 2m.
5. If the radar sensor is used together with a wireless communication module (NB, Bluetooth, WIFI, 2.4G module), the distance should be increased. It is recommended to keep a distance of more than 1m from high-power wireless communication devices such as routers and wireless hotspots during installation.
6. The light threshold of the radar sensor is the test value under the conditions of sunny environment, no shadow, and diffuse reflection of ambient light.
7. Easydetek Technology is committed to providing customers with high-quality and better experience radar sensors. When the product version is updated and iterated, no further notice will be given. If necessary, please contact our sales staff to obtain the latest product information.

⌚ For More Information, Please Visit



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