

EDC19AK Specification

5.8GHz High Altitude Series



Product Features

- Flexible structure, can be installed independently
- Automatic on/off control of the light sensor
- Selectable detection range, delay time, photosensitive threshold, standby time and standby brightness
- Phase-locked loop, fixed operating frequency
- CE-RED, FCC, RoHS, REACH certified
- Fully waterproof design (waterproof grade IP65)
- Matching infrared remote control, real-time control from a distance
- Multi-mode output, support 0%-100% dimming

Electrical Parameters

Input voltage	12±1V
Operating current	38-42mA
Output voltage	3.3V PWM
Output signal	IO/PWM

Functional Parameters

Motion sensing radius ① (recommended)	8-12m @ hang up high 12m
Hanging height	≤12m
Delay time	5s(Remote control adjustable)

Output Parameters

Center frequency	5.8GHz±75MHz
3dB beam angle	97° (XZ plane) 99° (YZ plane)

Environment & Lifespan

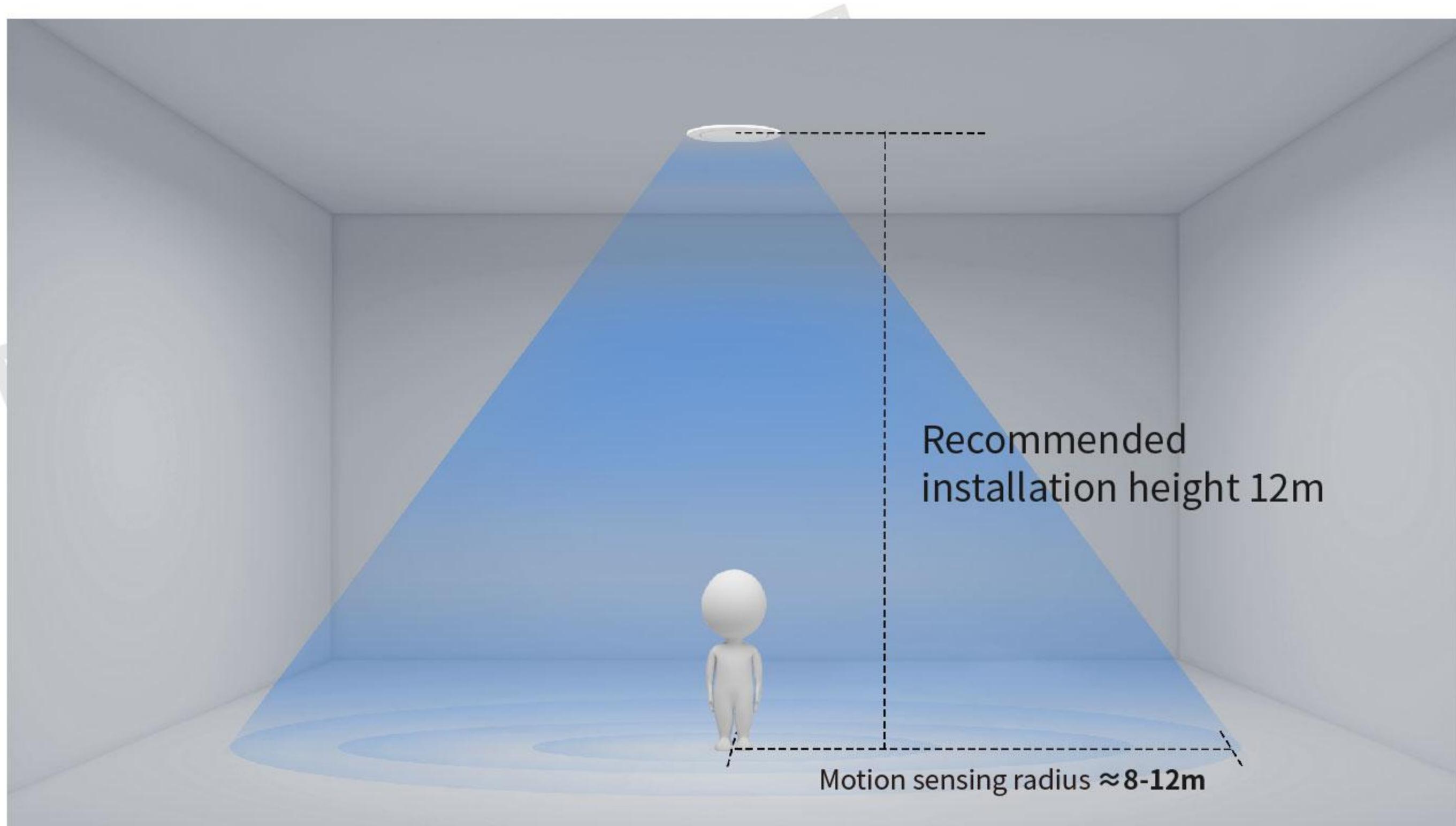
Operating temperature	-20~+85°C
Storage temperature	-20~+105°C

Remarks:

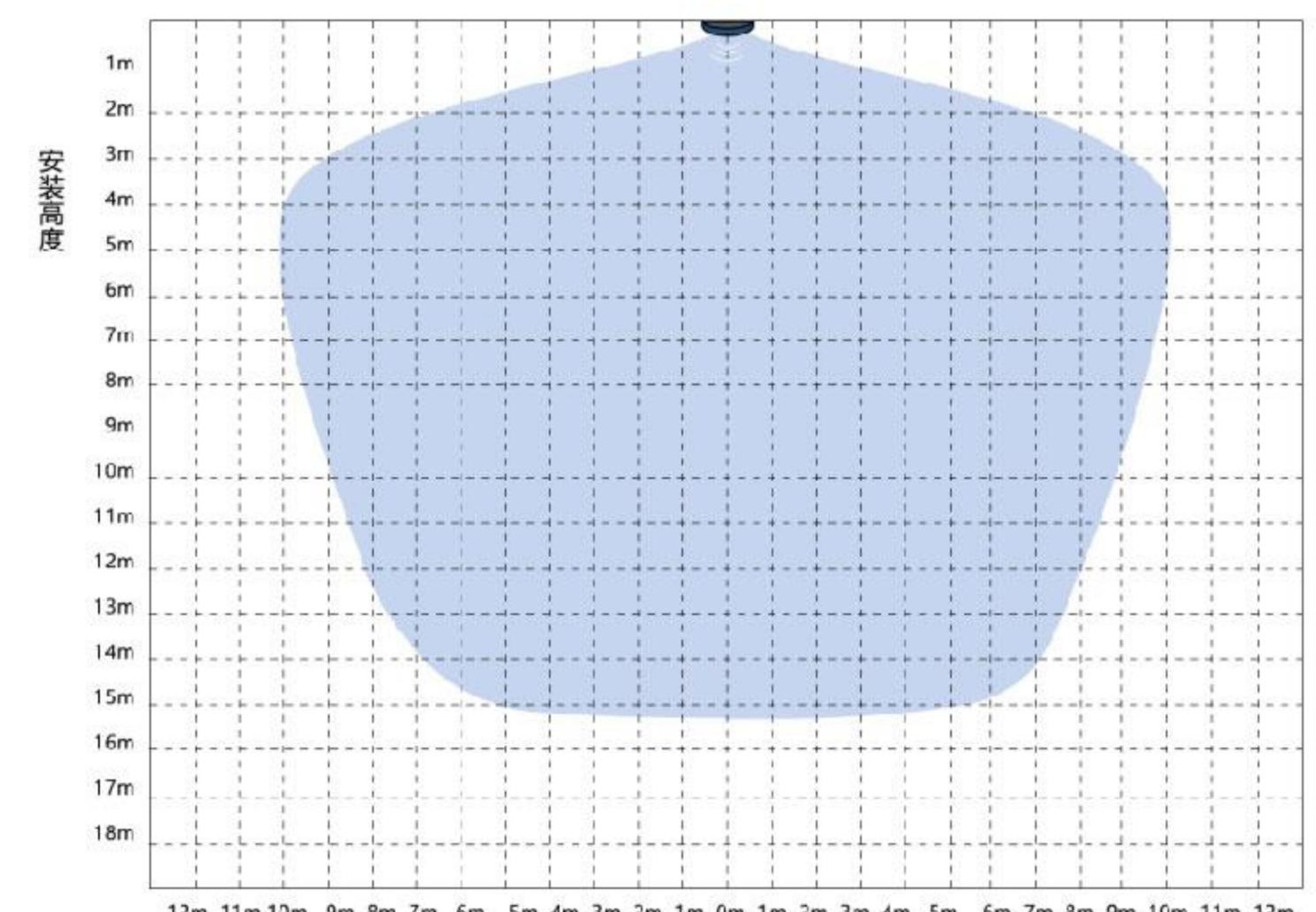
① test distance range is based on the sensor outdoor hanging height 9-12m installation environment test, the testpersonnelheight 170cm, weight 65-75kg, walking speed 1m / s, different scene installation may cause the scope of change, to the actual test shall prevail.

② Due to the spectral characteristics of the photosensitive device, the threshold is uniformly tested under natural light conditions.

Detection Schematic



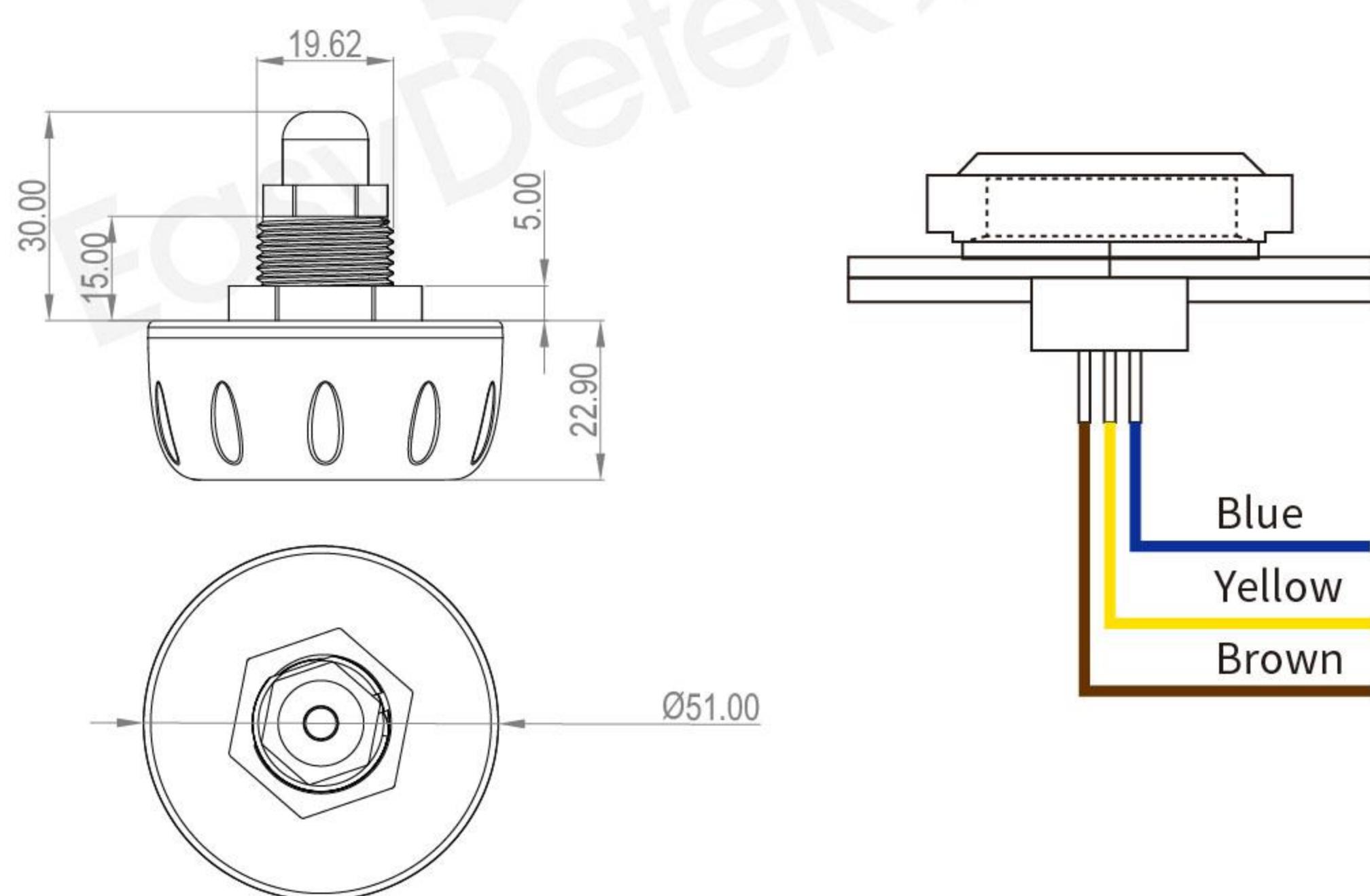
Radar Sensing Schematic



Motion sensing radius \approx 8-12m
(12m hang up high)

Dimension Drawing / Pinout

unit of measurement: mm

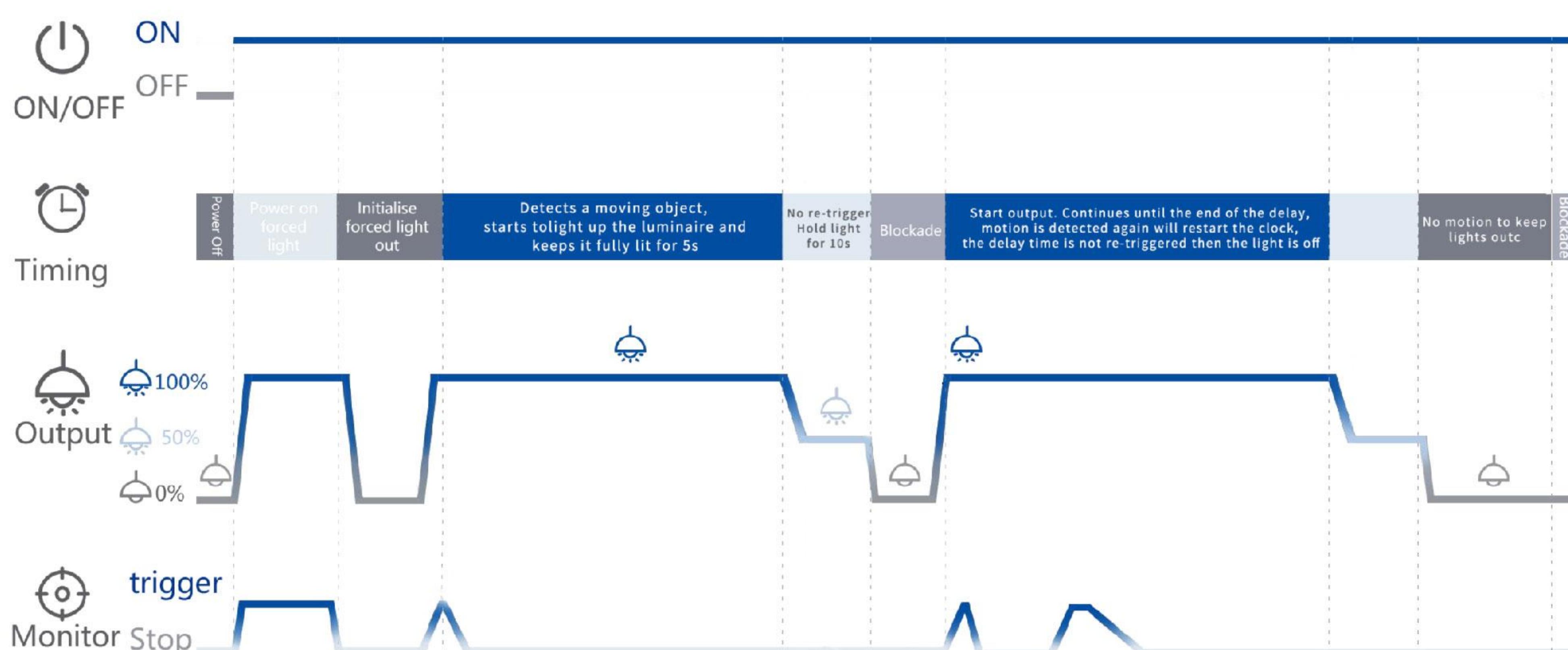


EDC19AK Dimensional tolerances: ± 0.2

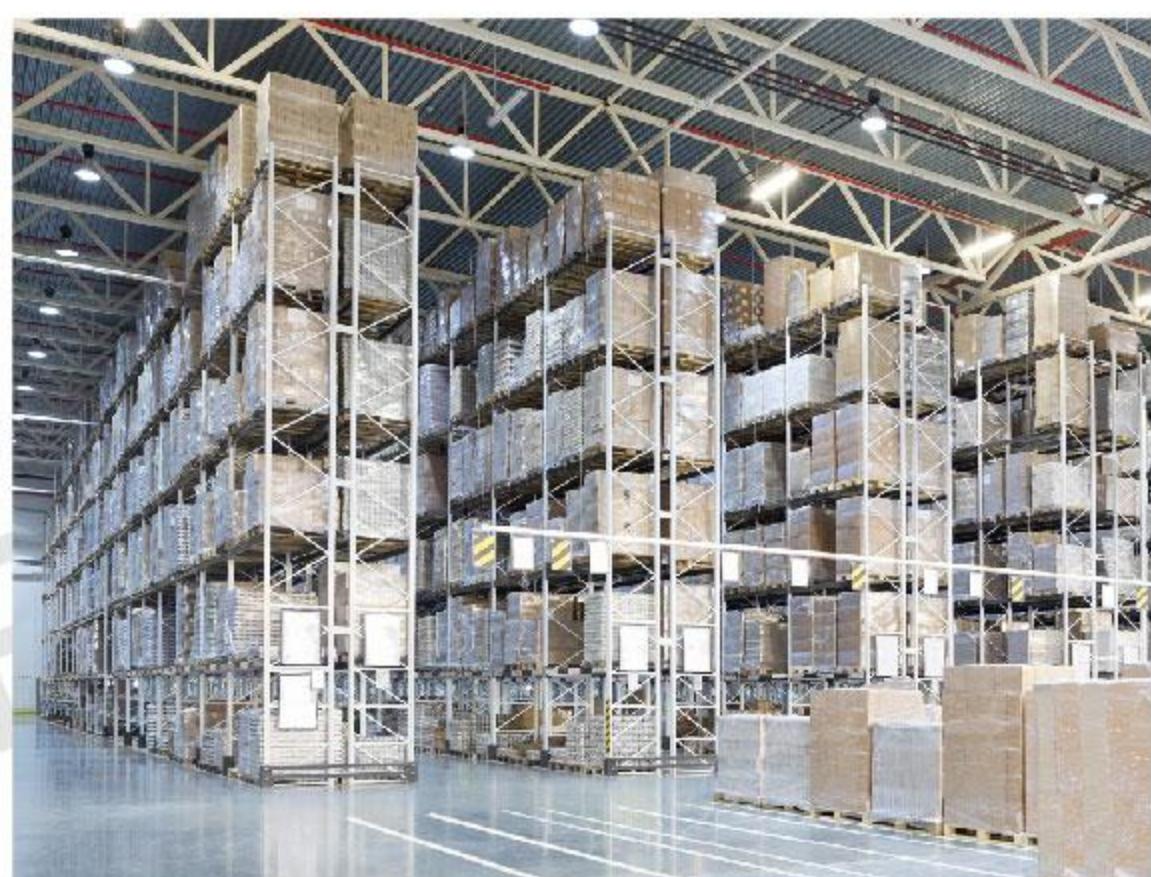
Pin Description

Thread Colour	Description
Blue	GND
Yellow	Power supply 12V DC
Brown	PWM Output

时序图



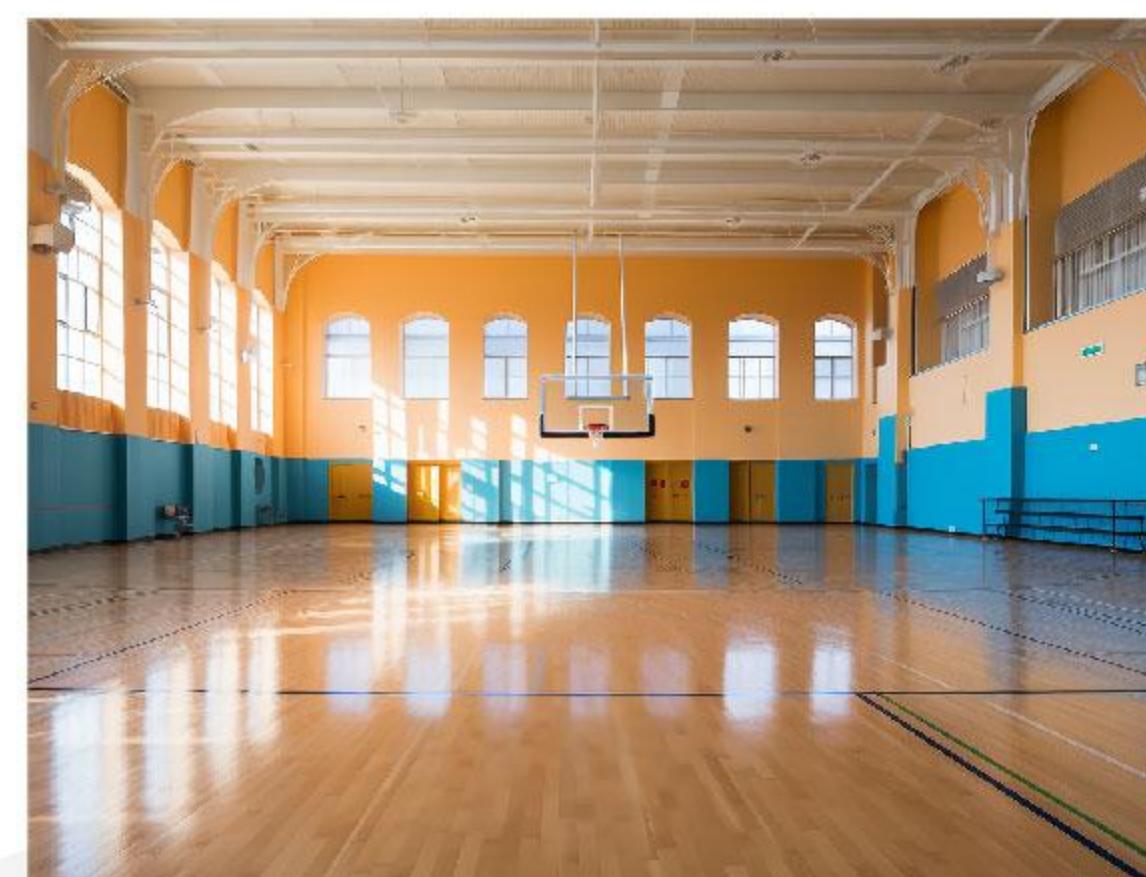
⌚ Application Scenarios/Products



repository



factory



gymnasiums

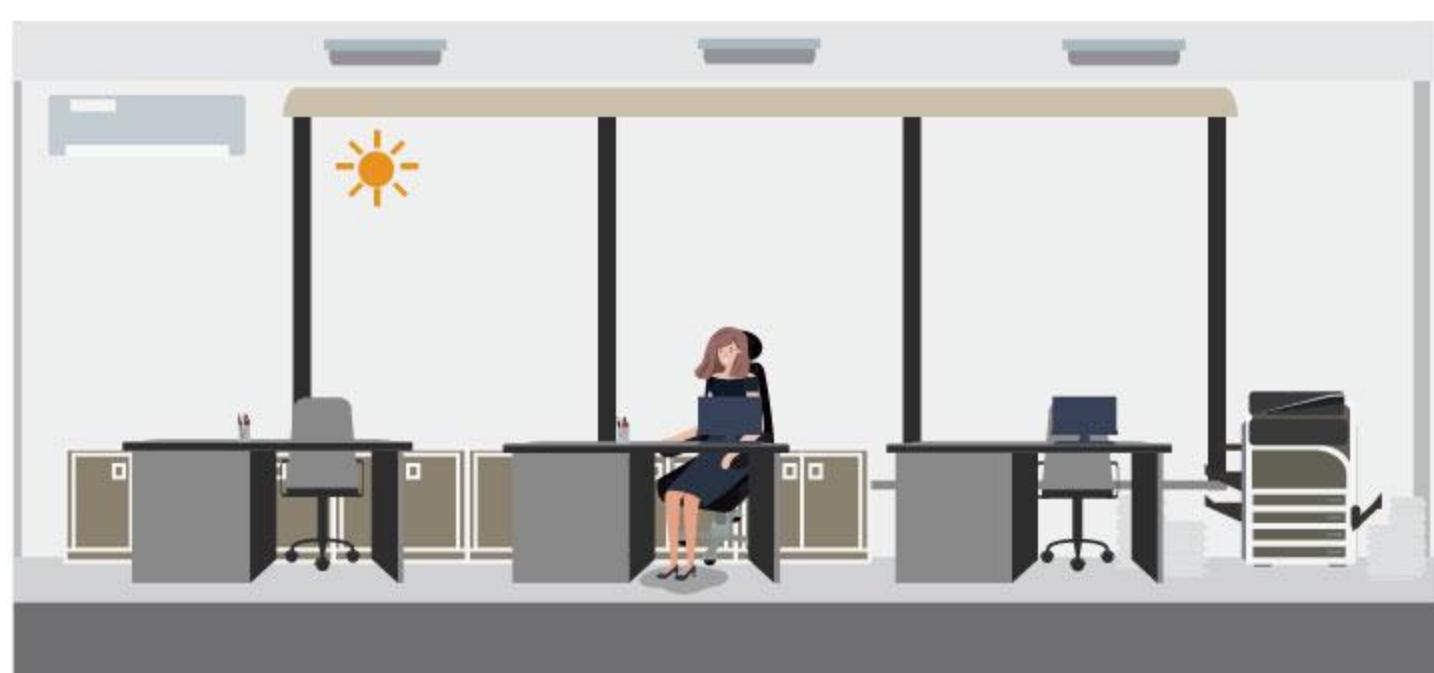


UFO



high bay

⌚ Functional Description



After initialization is complete, when the ambient light is sufficient, the sensor detects a moving object, the light will not come on automatically.

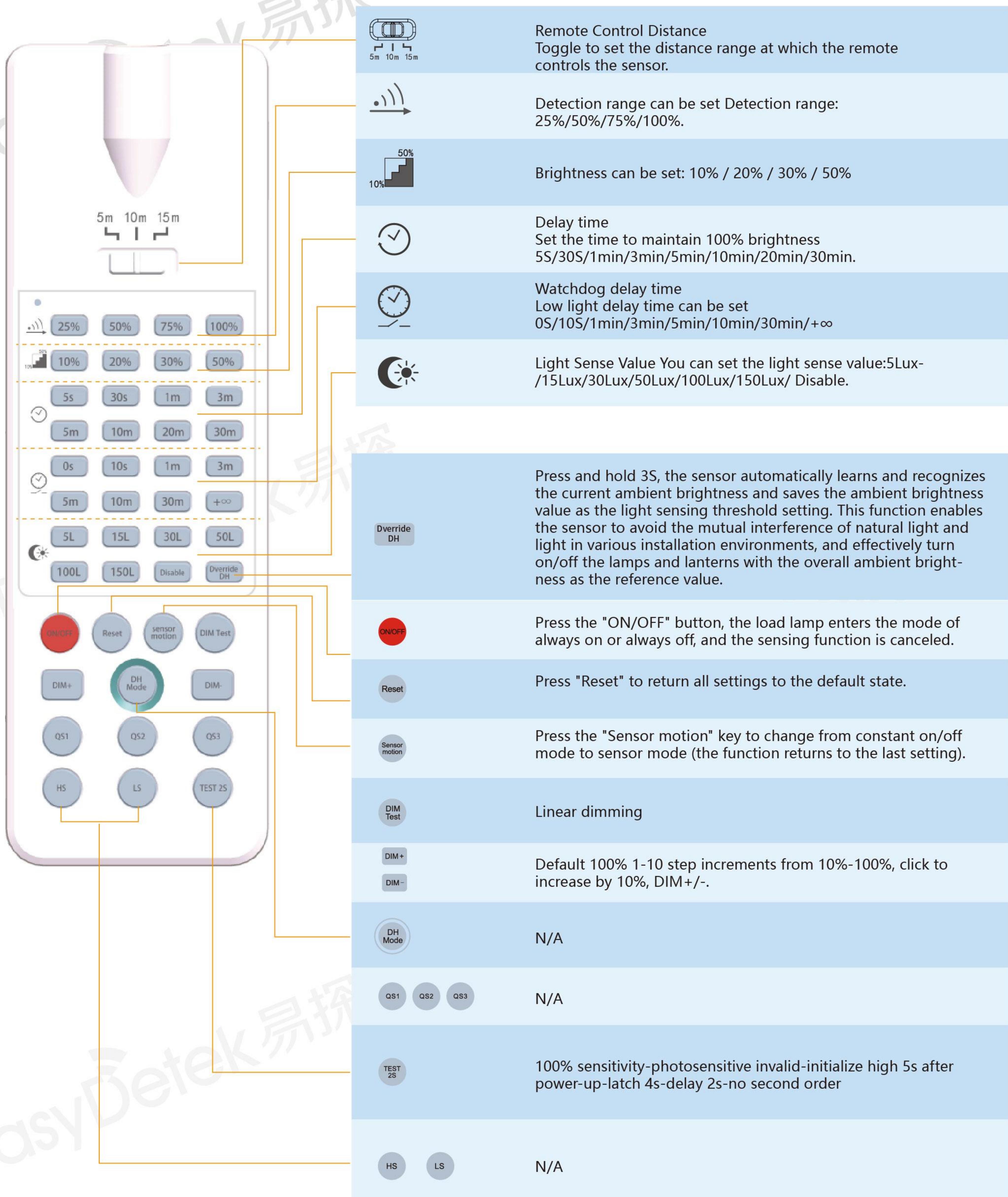


When the ambient light is not sufficient, the sensor detects a moving object and the light comes on automatically.



The moving object leaves. After the preset delay time has elapsed, the light goes out automatically.

Remote Control Description



Product Naming Law

ED	Frequency Band	Product Categories	Product Subdivision	Product Number	Delay Time	Serial number
ED	C	1	9	AK	Y	
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】: EDC19AK-Y-01

【Hardware】:

【Software】:

History Revision Record

Versions	Time	Descripcion	Note
V1.0	2024-10-18	First Edition	-
V1.1	2024-10-24	Updated product features	-

⌚ Precautions

1. When the product is installed, it is recommended that the antenna plate keep a distance of 5-12mm from the metal plane, and cannot be close to or touch the metal plane.
2. Products on plastic, wood material penetration effect is better. It is recommended not to install metal, glass, ceramic in front of the antenna, so as not to affect the actual induction effect.
3. power supply, please use a small ripple power supply, to avoid interference with the sensor and false alarms, it is recommended that the power supply ripple is guaranteed to be within 50mV-100mV.
- 4, more than one radar sensor in the same site application, recommended product installation distance greater than 2m, the installation distance is too close to the individual sensors may occasionally false alarms.
- 5, the antenna radiation surface to avoid high current circuit coverage, so as not to interfere with the normal radiation antenna, resulting in false alarms or change the induction range.
- 6, such as microwave sensors and wireless communication modules (NB, Bluetooth, WIFI, 2.4G module) coexisting applications, should be spaced apart. Recommended installation and routers, wireless hotspots and other high-power wireless communications equipment to maintain a distance of 1m or more.
- 7, the light-sensitive threshold is in the sunny environment, no shadow, ambient light diffuse reflection conditions of the test value.
- 8, the antenna surface of the microwave sensor should avoid facing the drive power supply, while trying to stay away from the drive power supply rectifier bridge, transformer, switching tubes and other high-power devices, so as not to trigger false alarms.
- 9, Eprobe is committed to providing customers with high quality and better experience of radar sensors. Product version updates and iterations without notice.