



# RTCGE01

## **Ceiling Mounted Detection Sensor**

RTCGE01 Ceiling Mounted Detection Sensor adopts the third generation of passive infrared sensors (PIR) detection technology. With built-in high-precision algorithm unit, RTCGE01 can automatically adapt to specific room environments and filter out interference caused by temperature and humidity changes. The sensor can effectively identify people up to a range of 7 meters. Powered by two easily replaceable AAA batteries, giving the sensor a life span of over 5 years. RTCGE01 is fixed in a central location of a room using an adhesive, with an installation time of <1 minute.

#### **Features**

### **Dynamic Human Body Detection**

When a person moves within the detection range of the RTCGE01, the sensor can respond almost instantaneously and report the status change.

#### **Bluetooth Mesh Technology**

Bluetooth Mesh technology used in RTCGE01 is a global wireless standard for communication between smart devices in industrial automation environments. Bluetooth Mesh technology uses a reliable mesh network to keep devices connected and working together while providing excellent battery life.

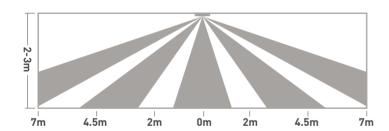
### **Dynamic Temperature Compensation**

Dynamic temperature compensation enables RTCGE01 to automatically monitor the ambient temperature and adjust the signal processing algorithms to maintain normal sensing performance in varying temperatures.

### **Real-time Data Reporting and Offline Caching**

RTCGE01 reports measurement data through the gateway with a delay of less than 100 ms. If the sensor is offline, the data will be cached locally and transmitted after the network connection is restored.

### **Installation Guide**



\* The recommended installation height is between 2m and 3m. Installed below 2m or above 3m, blind spots will appear and some area cannot be detected.

### **Datasheet**

### **General Specifications**

Dimensions 94mm in diameter, 38mm in thickness

Weight (with battery) 83.5g
Casing ABS plastic

### **Environment Requirements**

Operating temperature  $-10\sim45\,^{\circ}\mathrm{C}$ 

 $\begin{array}{ll} {\rm Operating\ humidity} & {\rm O}\!\sim\!95\%{\rm RH,\ no\ condensation} \\ {\rm Mounting\ location} & {\rm 3m\ away\ from\ the\ floor} \\ {\rm Mounting} & {\rm Srews\ /\ Adhesives} \end{array}$ 

Detection angle 360°
Detection distance ≤7m

### **Power**

Battery AAA battery x 2
Battery life 5 years

### **Others**

IP rating IP52
Standards EN 60669-1
EN 60669-2-1

\* The above data is measured by 9am laboratory, and may be affected by environmental factors.

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NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are

designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio

frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Warning Statements:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.