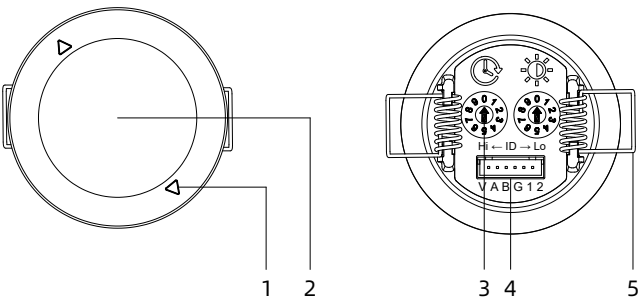


R1-PIR-485

The CTL-SEN-R1/1108 is a professional Passive Infrared (PIR) motion sensor powered by advanced pyroelectric sensing technology. Featuring a precision spherical lens design , it provides high-density coverage to accurately capture human movement within a 360° field of view. With a comprehensive detection diameter of up to 6.0 meters and an integrated high-sensitivity illuminance sensor (0 to 32,000 Lux) , it is engineered to deliver intelligent, energy-efficient control for diverse smart building applications.



Interface



1. Orientation Marker
2. Fresnel Lens
3. Decimal Rotary Switch (Mode & Parameters)
4. Wiring Terminal (PH 2.0 mm 6-Pin)
5. Spring Clip

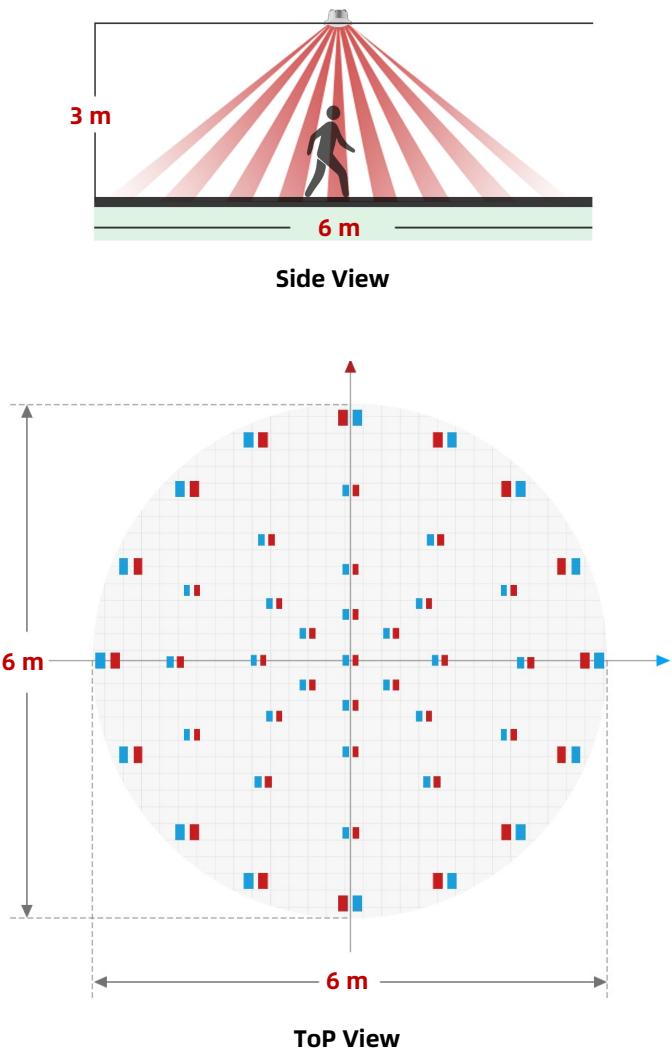
Features

- Equipped with PIR motion detection.
- Quad-element PIR technology enhances radial movement detection and minimizes blind spots.
- Integrated high-precision sensor for accurate indoor illuminance monitoring.
- 2 illuminance outputs
- Supports multiple protocols via RS485, including Modbus-RTU and Active Reporting.
- Adjustable lighting threshold.
- Supports parameter configuration and status readout via IR remote control.
- Indicator LED brightness automatically adjusts to ambient light levels.

Specifications

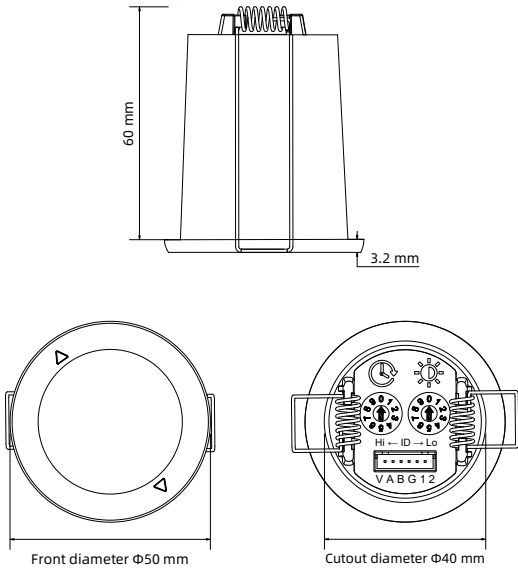
Communication Type	RS485
Input Voltage	DC 12 to 30 V
Power Consumption	0.5 W (Max)
Serial Port Settings	Baud Rate: 1200 to 115200 Data Bits: 8 Parity: None, Even, Odd Stop Bits: 1, 2 Default: 9600, 8, None, 1
Address Range	01 to 69 (Decimal)
Dry Contact Output	Normally Open Mode, Normally Closed Mode, Normally Open Pulse, Normally Closed Pulse
Dry Contact Load	AC or DC ≤ 30 V , ≤ 200mA
Indicator Light	LED
Detection Mode	Pyroelectric Infrared Receiver
Installation Method	Recessed Ceiling Mount
Mounting Height	2.0 to 4.0 m
Detection Angle	360°
Detection Range	When the installation height is 3.0 m, the motion detection diameter is ≤ 6.0 m
Illuminance Monitoring	0 to 32,000 Lux (Accuracy ±4%)
Delay Time	1 to 3,600 seconds
Product Size	Φ50 mm × 60 mm
Cutout Size	Φ42 mm
Product Weight	37.5 g
Cable Assembly	UL1007 22AWG Cable Length: 150 mm
Operating Environment	Indoor -20 to 45°C Humidity < 95% RH (Non-condensing)
Storage Temperature	-40 to 85°C
Protection Level	IP20
Housing Material	PC

Detection Range



Dimensions

Recessed mount, product outer diameter 50 mm, product depth 60 mm, cutout diameter 42 mm.



Installation Notes

Interference Avoidance: Avoid installing near moving objects (e.g., pets, swinging curtains) or areas with rapid temperature changes (e.g., AC vents, heat sources) to ensure accuracy and prevent false alarms.

Mounting & Handling: Ensure the installation surface is firm and stable to avoid vibration. Handle the device with care during unpacking and installation to prevent physical damage to the shell or circuit board.

Wiring Safety: Disconnect power before wiring. Use certified cables and strictly follow the diagram to ensure proper circuit protection.

Packaging Disposal: Dispose of packaging materials safely and immediately according to local regulations.

Disclaimer: Product specifications are subject to change without prior notice. Please strictly follow these guidelines; the manufacturer is not liable for performance issues or interference caused by improper installation.

Available Accessories



Remote Control (60.99.00C1)

Ordering Information

P/N	Short Name	Model	Remarks
60.10.1108	R1-PIR-485	CTL-SEN-R1/1108	Main Unit
60.99.00C1	RC1	RC1	Accessory