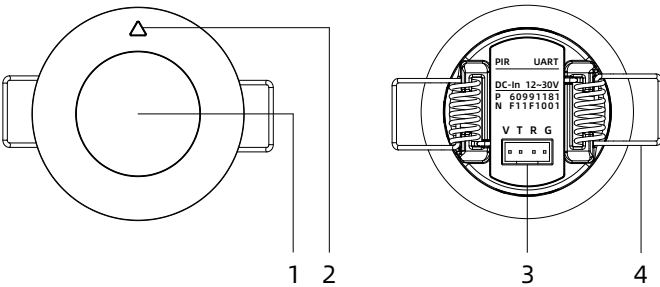


Mini-PIR-UART

The CTL-SEN-Mini/1181 Series is a compact, high-sensitivity motion sensor powered by precise Passive Infrared (PIR) technology. Designed for discreet, premium applications, it features a miniature form factor (Φ35 mm cutout) while offering a 360° detection diameter of up to 6.0 m. It integrates a high-precision lux sensor (0–32,000 Lux) for energy-efficient lighting automation.



Interface



1. Fresnel Lens
2. Orientation Marker
3. Connector (V: DC Input DC 12 to 30 V positive; T: Serial data transmission output; R: Serial data reception input; G: DC Input GND)
4. Spring Clip

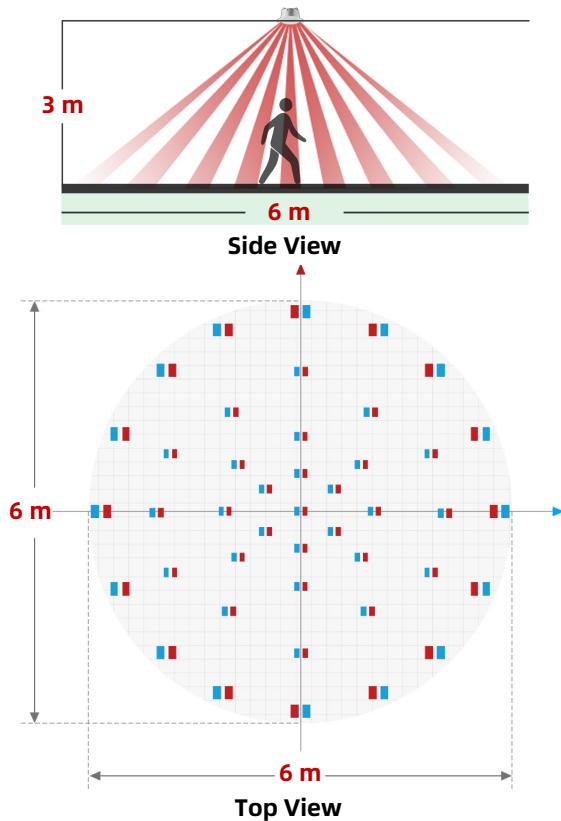
Features

- 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

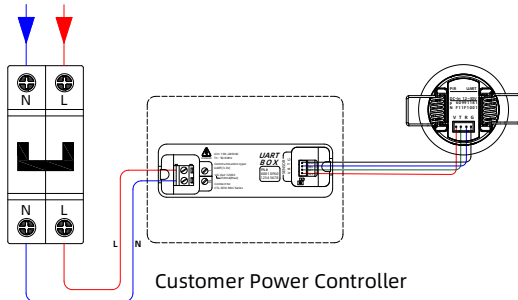
Communication Type	UART
Input Voltage	DC 12 to 30 V
Power Consumption	0.5 W (Max)
Serial Port Settings	Baud Rate: 1200 to 115200 Data Bits: 8 Parity: None, Even, Odd Stop Bits: 1, 2 Default: 115200, 8, None, 1
Address Range	01 to 99 (Decimal)
Indicator Light	LED
Detection Mode	Pyroelectric Infrared Receiver
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	Φ43 mm × 25 mm
Cutout Size	Φ35 mm
Product Weight	14.5 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



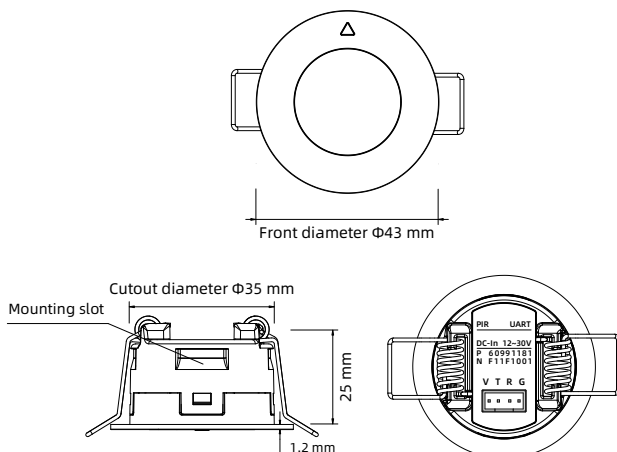
Wiring Diagram

AC 100 to 240 V



Dimensions

The product features an outer diameter of 43 mm and a depth of 25 mm, requiring a 35 mm cutout. Designed for recessed installation, it is also compatible with optional kits for surface mounting, wall mounting, or external installation via a universal bracket.



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.

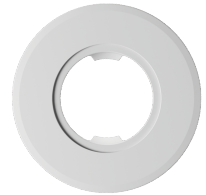
Packaging Disposal: Dispose of packaging materials safely and immediately according to local regulations.

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



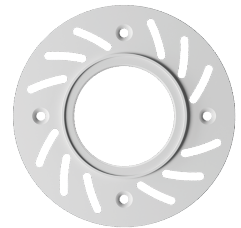
Remote Controller
(60.99.00C1)



Cover Ring
(60.99.0A55)



In-wall Mounting 86 Panel Frame
(60.99.0A86)



Borderless Embedded Parts
(60.99.0A40)



Surface Mounting Socket
(60.99.0A50)



Surface Mounting Universal Bracket
(60.99.A360)

Ordering Information

P/N	Short Name	Model	Remarks
60.99.1181	Mini-PIR-UART	CTL-SEN-Mini/1181	White (Default)
60.9B.1181	Mini-PIR-UART/B	CTL-SEN-Mini/1181B	Black
60.99.00C1	RC1	RC1	Accessory
60.99.0A55	Mini-ASSY-55	A55	Accessory
60.99.0A86	Mini-ASSY-86	A86	Accessory
60.99.0A40	Mini-ASSY-BL	A40	Accessory
60.99.0A50	Mini-ASSY-CYL	A50	Accessory
60.99.A360	Mini-ASSY-360	A360	Accessory