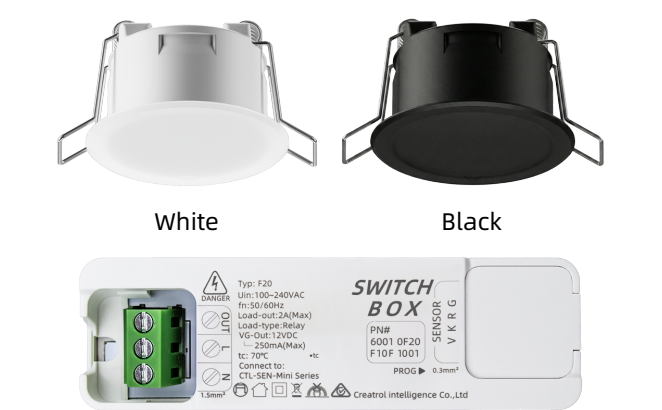
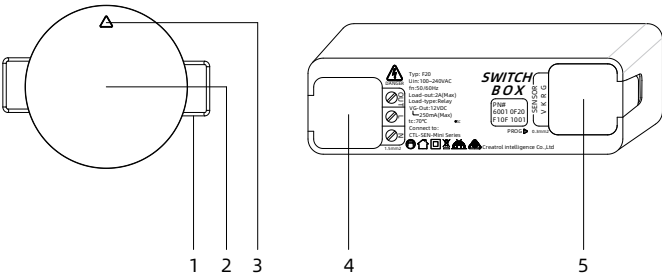


Mini-24G-S1

The CTL-SEN-Mini/2111.F20 is a compact, high-precision presence sensor powered by advanced 24GHz FMCW mmWave technology. Designed for discreet, premium applications, it features a miniature form factor (Φ35 mm cutout) while offering a detection diameter of up to 8.0 m. It integrates a high-precision lux sensor (0-32,000 Lux) for advanced lighting automation.



Interface



- 1. Spring Clip
- 2. Radar Sensing Surface
- 3. Orientation Marker
- 4. Power Connection Port (AC 100 to 240 V)
- 5. Sensor Wiring Terminal (PH 2.0 mm 4-Pin)

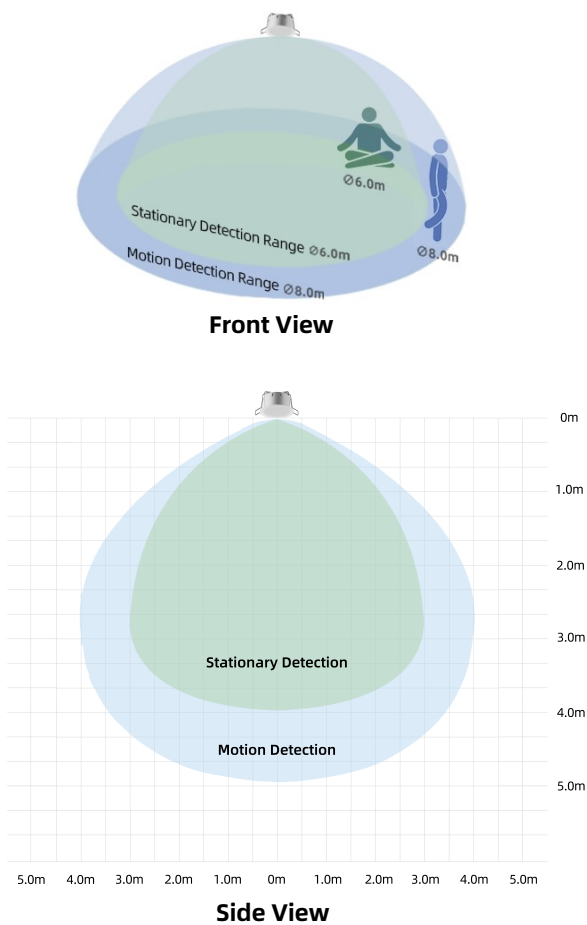
Features

- Accurately identifies motion, micro-motion, and Presence.
- Sensitivity and detection distance can be adjusted independently.
- Integrated high-precision sensor for accurate indoor illuminance monitoring.
- Features 1 relay output
- Adjustable lighting threshold.
- Supports parameter configuration and status readout via IR remote control.
- Indicator LED brightness automatically adjusts to ambient light levels.
- Powered by a proprietary module with advanced signal processing algorithms.

Specifications

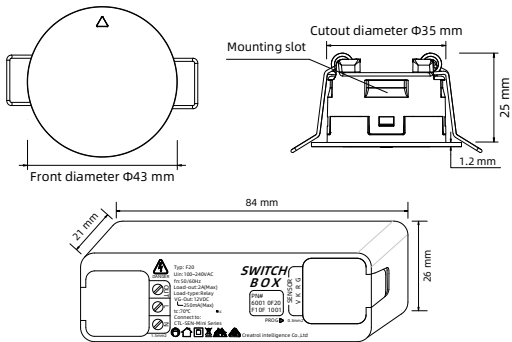
Output Type	Mains Output
BOX Input Voltage	AC 100 to 240 V
BOX Output Voltage	DC 12 V (< 500 mA)
Sensor Input Voltage	DC 12 V
Power Consumption	0.5 W (Max)
Relay Output	Normally Open Mode Normally Closed Mode
Relay Load	AC 100 to 240 V, ≤ 2 A
Indicator Light	LED
Detection Mode	24GHz FMCW Radar
Operating Frequency	24.00 to 24.25 GHz
Transmit Power	≤ 10 dBm
Installation Method	Recessed Ceiling Mount
Mounting Height	2.0 to 4.0 m
Detection Angle	360°
Detection Coverage	Installation at 3.0 m Height: ① Motion & Micro-motion: Detection diameter at least 8.0 m ② Stationary Presence: Detection diameter at least 6.0 m
Detection Range	1.5 to 8.0 m (sensor to target)
Sensitivity	0 to 100%
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	17.5 g
BOX Size	84 mm × 26 mm × 21 mm
BOX Weight	43 g
Cable Assembly	UL2468 22AWG Cable Length: 200 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

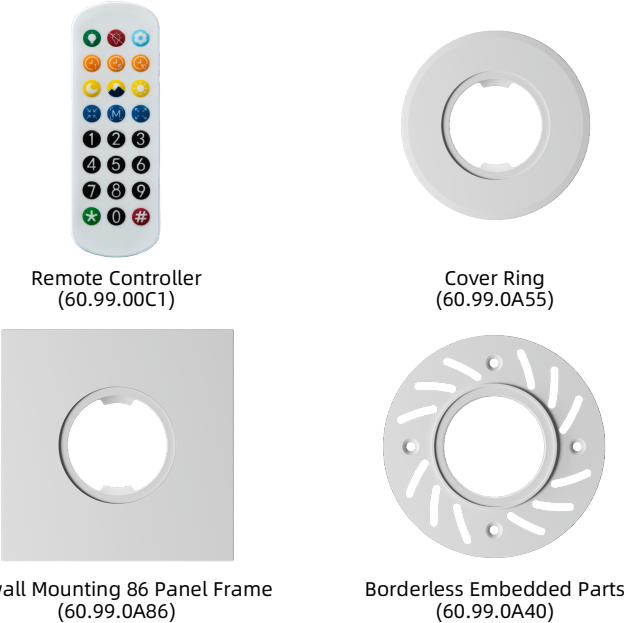
Measuring 43 mm wide and 25 mm deep, this recessed unit fits a 35 mm cutout and requires a minimum ceiling depth of 10 cm.



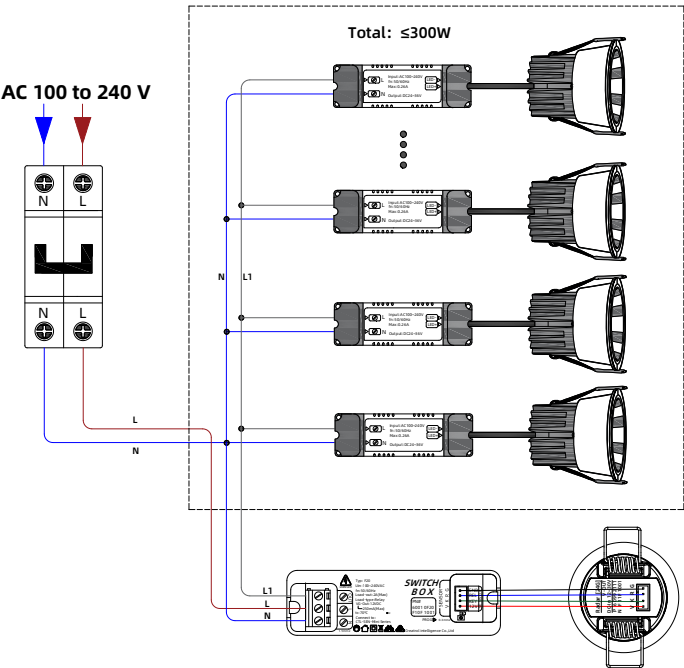
Installation Notes

- Interference Avoidance:** Keep away from moving objects (e.g., curtains, plants) and large metal/reflective surfaces.
- Device Spacing:** Maintain at least 4m between sensors.
- Mounting:** Install on a stable, vibration-free surface. Ensure no moving objects are behind the wall (signals penetrate non-metals).
- Wiring Safety:** Turn off power before wiring. Use certified cables and proper circuit protection.
- Disclaimer:** Follow wiring diagrams strictly. Manufacturer is not liable for improper installation. Specifications subject to change.

Available Accessories



Wiring Diagram



Ordering Information

P/N	Short Name	Model	Remarks
60.99.2111.F20	Mini-24G-S1	CTL-SEN-Mini/2111.F20	White (Default)
60.9B.2111.F20	Mini-24G-S1/B	CTL-SEN-Mini/2111B.F20	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