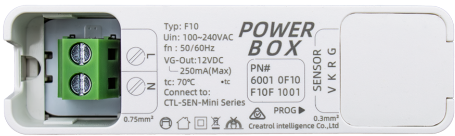
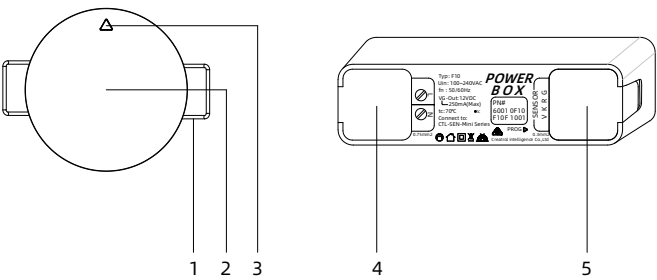


Mini-24G-TYZ/AC

The CTL-SEN-Mini/2216.F10 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)

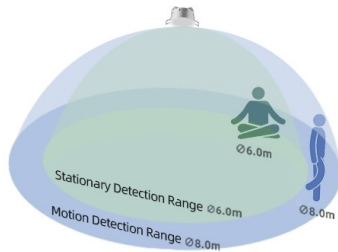
Features

- Accurately identifies motion, micro-motion, and Presence.
- Sensitivity and detection distance can be adjusted independently.
- Integrated high-precision sensor for accurate indoor illuminance monitoring.
- 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.

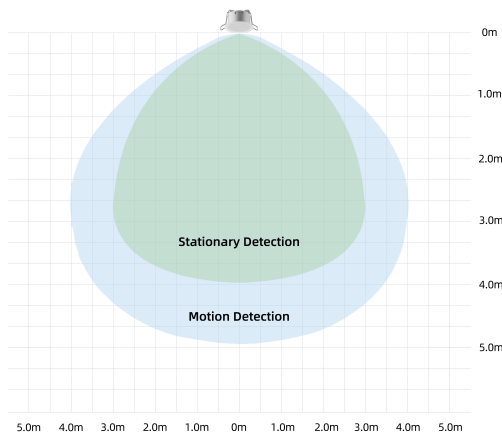
Specifications

Communication Type	TY-ZigBee
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)
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 8.0m ② Stationary Presence: Detection diameter at least 6.0m
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	75 mm × 20 mm × 22 mm
BOX Weight	29 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



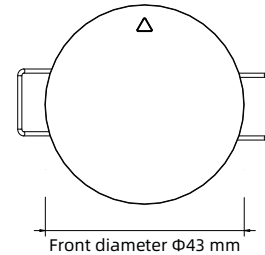
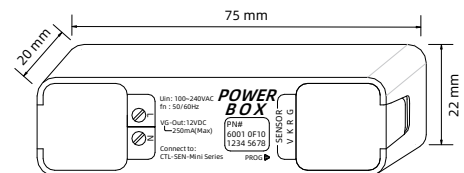
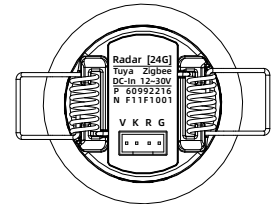
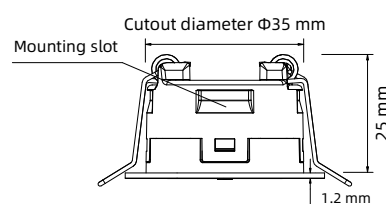
Front View



Side View

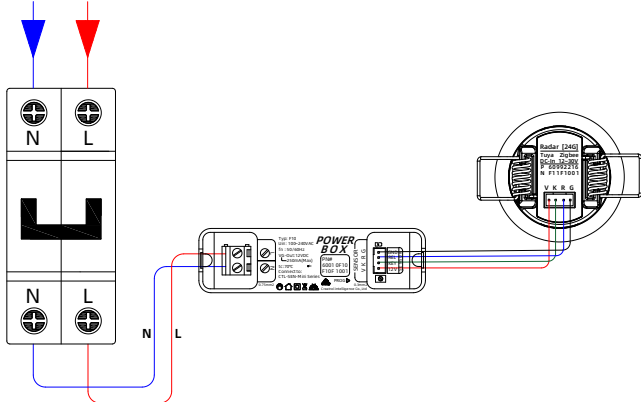
Dimensions

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 requires a minimum ceiling depth of 10 cm.

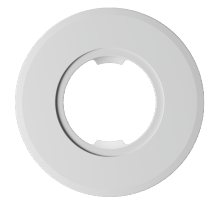
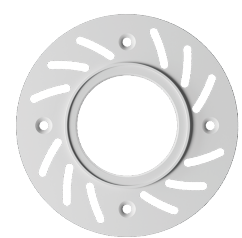
Front diameter $\Phi 43$ mm

Wiring Diagram

AC 100 to 240 V



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)

Installation Notes

Interference Avoidance: Keep away from moving objects (e.g., curtains, plants) and large metal/reflective surfaces.

Device Spacing: Maintain a minimum distance of 4 m between multiple sensors to prevent mutual interference.

Mounting: Install on a stable, vibration-free surface. Ensure no moving objects are behind the wall (signals penetrate non-metals).

Wiring Safety: Disconnect power before wiring. Use certified cables and ensure the circuit includes appropriate short-circuit and overload protection.

Disclaimer: Product specifications are subject to change without prior notice for improvement purposes. Please follow all wiring diagrams strictly. The manufacturer is not liable for issues caused by improper installation.

Ordering Information

P/N	Short Name	Model	Remarks
60.99.2216.F10	Mini-24G-TYZ/AC	CTL-SEN-Mini/2216.F10	White (Default)
60.9B.2216.F10	Mini-24G-TYZ/AC/B	CTL-SEN-Mini/2216B.F10	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