PRODUCT DATASHEET

TECHNICAL DOCUMENTATION

HUMAN-PRESENCE RADAR MODULE

PS-CM-60G

Ceiling Mount mmWave Human Presence Sensor — 60 GHz

Document No.	PS-TDS-CM-60G	**Version**	V1.0
Model	PS-CM-60G	**Issue Date**	2026-11-08

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Document Information

Document title	presencesensor.com Product Datasheet	**Model**	PS-CM-60G
Series	Human Presence Detection (presence)	**Document No.**	PS-TDS-CM-60G
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Prepared by	PresenceSensor Engineering Team	**Reviewed by**	Product Department
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1 Product Overview

60 GHz (57–64 GHz) ceiling-mount mmWave presence sensor. The 7 GHz bandwidth gives 2.1 cm range resolution and finer micro-motion discrimination, for spaces that need higher confidence on stationary occupants. Detects motion, micro-motion and breathing, 10 m motion range, 2.5 m micro-motion, 120° field of view, reported over Zigbee 3.0.

- Model: PS-CM-60G
- Product: Ceiling Mount mmWave Human Presence Sensor — 60 GHz
- Series: Human Presence Detection (presence)
- Frequency band: 60 GHz

2 Key Features

- 57–64 GHz V-band with 7 GHz bandwidth and 2.1 cm range resolution
- Finer discrimination of stationary micro-motion and breathing
- 2.5 m micro-motion range, 10 m motion range
- 120° field of view, flush ceiling mount (Φ86 mm)
- Zigbee 3.0 reporting, DC 5 V supply, standby below 0.5 W

Features are typical for this series. Refer to the latest datasheet for model-specific values.

3 Applications

Guest room occupancy for HVAC and lighting setback, meeting room and office presence detection, serviced apartment and short-term rental checkout detection, and non-intrusive occupancy monitoring in senior living and healthcare.

4 Technical Specifications

Frequency band	57–64 GHz (7 GHz bandwidth)	**Modulation**	FMCW
Supply voltage	DC 5 V	**Operating current**	—
Average power	Standby < 0.5 W	**Detection range**	Motion 10 m / micro-motion 2.5 m
Field of view	120°	**Range resolution**	2.1 cm
Interface	Zigbee 3.0	**Output**	Occupancy state (motion / micro-motion / breathing)

Operating temp.	-10 °C to +55 °C	**Storage temp.**	—
Dimensions	Φ86 mm × 35 mm, IP54	**Antenna**	On-board antenna
Certification	CE / FCC / RoHS / ISO 9001	**Remarks**	Specifications subject to the latest datasheet.

Table 1 Technical specifications. Subject to the latest datasheet without prior notice.

5 Wiring

The sensor is powered from a DC 5 V supply and reports presence over Zigbee 3.0. Terminals are V+ (red), V− (black) and GND (green).

Pin	Name	Type	Description
1	V+	Power	DC 5 V input (red)
2	V-	Power	0 V return (black)
3	GND	Power	Ground (green)
4	—	—	—
5	—	—	—

Table 2 Pin definition. Refer to the datasheet of the specific model.

6 Dimensions and Installation

6.1 Dimensions

Module outline dimensions and mounting holes are shown in the dimension drawing below (unit: mm).



Figure 1 Module dimensions

6.2 Installation

Recommended ceiling mounting at 2.6-3.0 m; wall mounting at 1.5-2.0 m. Adjust the tilt angle according to the detection area.



Figure 2 Installation and detection coverage

Refer to the Installation Guide of the specific model for the relationship between mounting height, tilt angle and detection coverage.

7 Communication and Configuration

7.1 Communication Protocol

Default UART: 256000 bps, 8 data bits, 1 stop bit, no parity. See the Serial Communication Protocol for frame format and commands.

7.2 Configuration Tool

The configuration tool supports parameter read/write, range gate setup, sensitivity adjustment and firmware upgrade.

7.3 Typical Application Circuit

Wiring: red V+ (DC 5 V), black V− (0 V), green GND. Check polarity before applying power.

Figure 3 Typical application circuit

8 Model Selection

The series is organized by frequency band and sensing function. Select a model based on detection range, mounting method and interface.

Model	Band	Series	Typical Application
PS-CM-60G	60G	Human Presence Detection	Indoor presence detection, smart lighting, building energy saving, security automation, elderly care
PS-CM-ZB	24G	Human Presence Detection	Indoor presence detection, smart lighting, building energy saving, security automation, elderly care
PS-CM-WF	24G	Human Presence Detection	Indoor presence detection, smart lighting, building energy saving, security automation, elderly care
PS-CM-MTR	24G	Human Presence Detection	Indoor presence detection, smart lighting, building energy saving, security automation, elderly care

Table 3 Model selection. See the product center on the website for the complete model list.

9 Document Downloads

The following documents are available for this model on its product page at {SITE_BRAND}.

Category	File	Version	Description
Development	—	—	Datasheet / user manual / protocol
Development	—	—	Schematics / footprint / 3D model
Application	—	—	Configuration tool
Utility	—	—	Serial driver / terminal

Table 4 Document list. File names and versions follow the download page.

10 Ordering Information and Support

Please specify the model, quantity and interface when ordering. For samples, quotations or technical support:

- Website: presencesensor.com

- Products: presencesensor.com/products
- Support: sales@presencesensor.com
- Sales: sales@presencesensor.com

Appendix A Revision History

Version	Date	Description	Prepared / Reviewed
V1.0	2026-11-08	Initial release	PresenceSensor Engineering Team
—	—	—	PresenceSensor Engineering Team
—	—	—	PresenceSensor Engineering Team

Table 5 Revision history. Update the version and date for every revision.