PRODUCT DATASHEET

TECHNICAL DOCUMENTATION

HUMAN-PRESENCE RADAR MODULE

PS-24C-04

Ceiling Presence Sensor — USB Powered, Zigbee

Document No.	PS-TDS-24C-04	**Version**	V1.0
Model	PS-24C-04	**Issue Date**	2026-11-08

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Document Information

Document title	presencesensor.com Product Datasheet	**Model**	PS-24C-04
Series	Human Presence Detection (presence)	**Document No.**	PS-TDS-24C-04
Version	V1.0	**Issue date**	2026-11-08
Prepared by	PresenceSensor Engineering Team	**Reviewed by**	Product Department
Classification	Public		

Table A Document information

Contents

1 Product Overview

2 Key Features

3 Applications

4 Technical Specifications

5 Pin Definition

6 Dimensions and Installation

7 Communication and Configuration

8 Model Selection

9 Document Downloads

10 Ordering Information and Support

Appendix A Revision History

1 Product Overview

Ceiling-mounted 24.05–24.25 GHz radar sensor with a USB 5 V supply, reporting presence over Zigbee. Motion, static and sleep-state detection ranges are documented separately, and scene modes let the installer match the coverage to the room.

- Model: PS-24C-04
- Product: Ceiling Presence Sensor — USB Powered, Zigbee
- Series: Human Presence Detection (presence)
- Frequency band: 24.05–24.25 GHz

2 Key Features

- 24.05–24.25 GHz radar with dedicated motion, static and sleep detection ranges
- USB 5 V / 1 A supply — no mains wiring at the sensor
- 90° horizontal × 60° vertical field of view
- Scene modes (office, hotel, living room, bedroom, bathroom) set the detection diameter
- Zigbee pairing through a compatible gateway

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

3 Applications

Hotel guest rooms, offices and residential spaces where a low-voltage sensor is easier to install than a mains device.

4 Technical Specifications

Frequency band	24.05–24.25 GHz	**Modulation**	—
Supply voltage	USB 5 V / 1 A	**Operating current**	—
Average power	—	**Detection range**	3–6 m
Field of view	90° horizontal × 60° vertical	**Range resolution**	—
Interface	Zigbee	**Output**	—
Operating temp.	−10 to +50 °C	**Storage temp.**	—
Dimensions	29.5 × 73 × 86 mm	**Antenna**	—

Certification	—	**Remarks**	Detection ranges are the manufacturer reference values; the three states (motion, static, sleep) use different ranges.

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

5 Wiring Terminals

The module uses a 5-pin header/socket interface defined as follows:

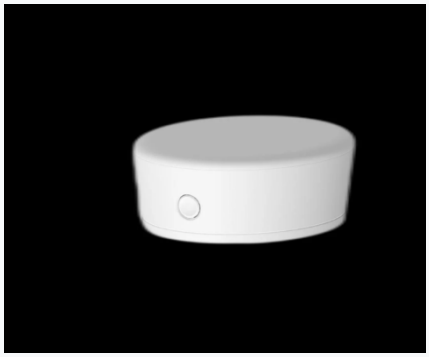
Pin	Name	Type	Description
1	USB	Power	USB 5 V / 1 A supply (power cable supplied)
2	—	—	—
3	—	—	—
4	—	—	—
5	—	—	—

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

6 Dimensions and Installation

6.1 Dimensions

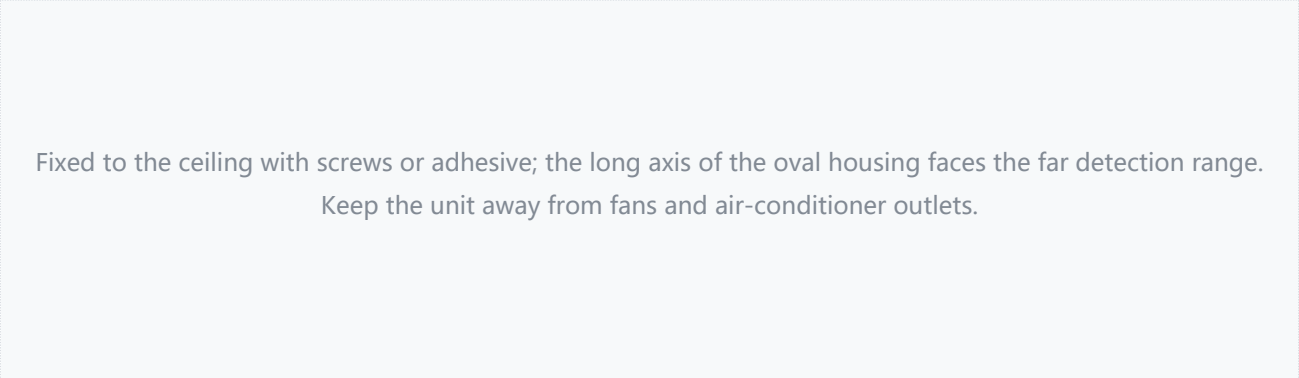
Outline dimensions per the manufacturer drawing (unit: mm).



Product illustration

6.2 Installation

Fixed to the ceiling with screws or adhesive; the long axis of the oval housing faces the far detection range. Keep the unit away from fans and air-conditioner outlets.



Installation

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

7 Communication and Configuration

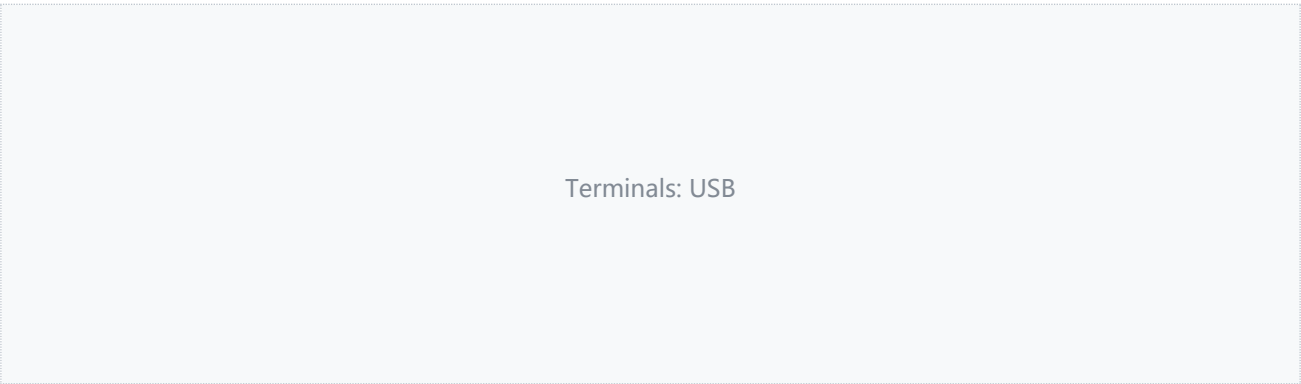
7.1 Communication Protocol

The sensor joins a Zigbee gateway and is commissioned in the mobile app; scene modes set the detection diameter.

7.2 Configuration Tool

Configuration is done through the platform the device is paired with.

7.3 Typical Application Circuit



Wiring terminals

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-24C-04	24G	Human Presence Detection	Indoor presence detection, smart lighting, building energy saving, security automation, elderly care
PS-24C-01	24G	Human Presence Detection	Indoor presence detection, smart lighting, building energy saving, security automation, elderly care
PS-24C-02	24G	Human Presence Detection	Indoor presence detection, smart lighting, building energy saving, security automation, elderly care
PS-24C-03	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.