PRODUCT DATASHEET

TECHNICAL DOCUMENTATION

HUMAN-PRESENCE RADAR MODULE

PS-60M-01

60 GHz Presence Radar Module — UART

Document No.	PS-TDS-60M-01	**Version**	V1.0
Model	PS-60M-01	**Issue Date**	2026-11-08

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Document Information

Document title	presencesensor.com Product Datasheet	**Model**	PS-60M-01
Series	Human Presence Detection (presence)	**Document No.**	PS-TDS-60M-01
Version	V1.0	**Issue date**	2026-11-08
Prepared by	PresenceSensor Engineering Team	**Reviewed by**	Product Department
Classification	Public		

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1 Product Overview

1T2R FMCW radar module for integration. It reports target distance, speed and angle, and detects a stationary person through the chest micro-motion of breathing. 59–64 GHz with 5 GHz adjustable bandwidth, 12 × 11 × 2 mm.

- Model: PS-60M-01
- Product: 60 GHz Presence Radar Module — UART
- Series: Human Presence Detection (presence)
- Frequency band: 59–64 GHz

2 Key Features

- 59–64 GHz FMCW, 5 GHz adjustable bandwidth, 11 dBm transmit power
- 1T2R architecture with multi-target tracking
- Motion detection ≤10 m, micro-motion up to 8 m, both configurable
- ±60° horizontal and ±60° vertical field of view
- 3.0–5.5 V supply, UART / GPIO output, 12 × 11 × 2 mm

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

3 Applications

OEM integration into luminaires, displays, appliances and presence-sensing products that supply their own enclosure and radio.

4 Technical Specifications

Frequency band	59–64 GHz	**Modulation**	FMCW
Supply voltage	3.0–5.5 V	**Operating current**	80 mA
Average power	—	**Detection range**	≤10 m (0–10 m configurable)
Field of view	±60° horizontal, ±60° vertical	**Range resolution**	—
Interface	UART / GPIO	**Output**	UART / GPIO
Operating temp.	−30 to +85 °C	**Storage temp.**	−40 to +125 °C
Dimensions	12.0 × 11.0 × 2.0 mm	**Antenna**	1T2R

Certification	—	**Remarks**	Module only — requires carrier board, power supply design and RF-aware enclosure.

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:

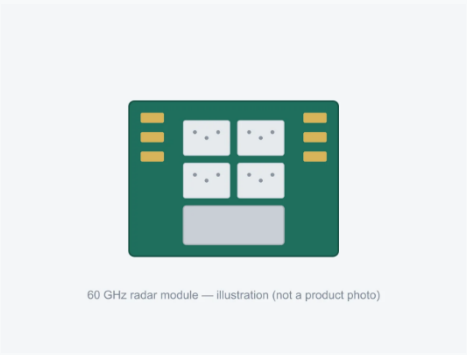
Pin	Name	Type	Description
1	VCC	Power	3.0–5.5 V supply
2	GND	Power	Ground
3	TX	Output	UART transmit
4	RX	Input	UART receive
5	—	—	—

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

6 Dimensions and Installation

6.1 Dimensions

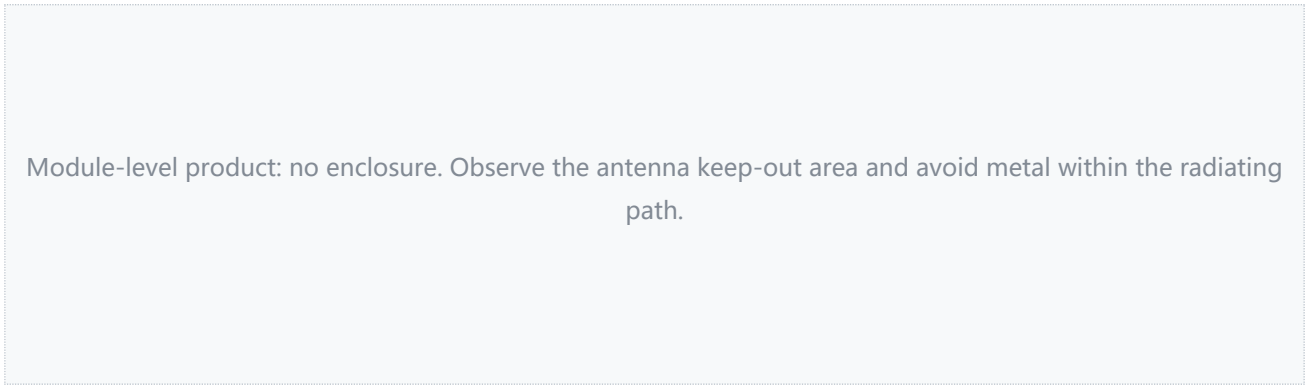
Outline dimensions per the manufacturer drawing (unit: mm).



Product illustration

6.2 Installation

Module-level product: no enclosure. Observe the antenna keep-out area and avoid metal within the radiating path.



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

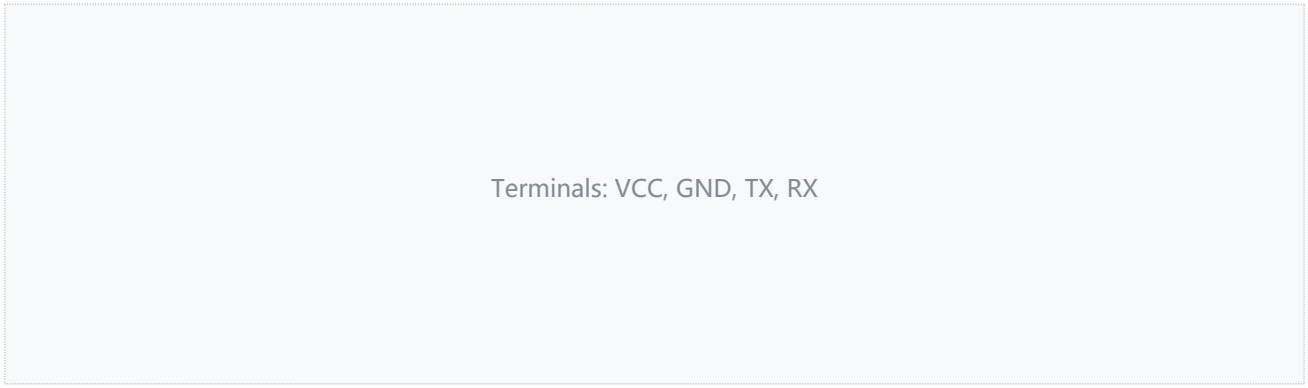
7.1 Communication Protocol

UART/GPIO interface; the host reads target distance, speed and angle, and configures range and sensitivity.

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-60M-01	60G	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.