

PRECIPITATION MONITORING / DATA SHEET

SS206-09

Radar Rain Sensor

24 GHz Doppler radar sensing for continuous precipitation monitoring.

Overview

- Registers raindrop speed and size to determine precipitation intensity.
- Provides compact radar sensing with no routine maintenance.



SUPPLY DC 7–30 V	RANGE 0.01–200 mm/h	RESOLUTION 0.1 mm	INTERFACE RS485 / RS232
Key Advantages • Advanced 24 GHz Doppler radar measurement. • 0.1 mm resolution with 1 Hz sampling. • Compact design with no routine maintenance.		Application Scenarios • Weather stations. • Hydrological monitoring. • Smart-city precipitation monitoring.	

MEASUREMENT PRINCIPLE

Technical Principle

The sensor uses a compact 24 GHz Doppler radar system to register raindrop speed. By comparing drop speed with drop size, the system determines precipitation quantity or intensity. The webpage describes classification of rain, snow, snow-covered rain, freezing rain and hail by drop speed, while its data-sheet table lists the precipitation type as “No precipitation, Rain”. The sensor provides up to 0.1 mm resolution without routine maintenance.

SYSTEM DATA

Technical Specifications

Item	Specification
Precipitation type	No precipitation, Rain
Measurement surface	8 cm ²
Measurement range	0.01–200 mm/h (liquid precipitation)
Accuracy	±10% of the measured value for liquid precipitation
Measuring drop size range	0.5–5.0 mm
Resolution	0.1 mm
Sample rate	1 measurement per second
Communication interface	RS485 / RS232

Protocol	ModBus / NMEA-0183 / ASCII
Supply voltage	DC 7–30 V; 130 mA at 12 V
Operating temperature	–40 °C to +70 °C
Operating humidity	0–100% RH
Overall size	Ø105 × 178 mm
Material	Aluminum alloy + ABS
Net weight	0.45 kg

ORDERING INFORMATION

Product Selection

Code	Description
SS206-09	24 GHz Doppler radar rain sensor

MECHANICAL DATA

Mechanical Dimensions & Product Views

The webpage specifies an overall size of Ø105 × 178 mm and identifies the construction as aluminum alloy + ABS. The supplied product views are retained below for visual reference; no additional dimensions are inferred from the photographs.

Product View	Field Installation View
	

INTERFACE & PROTOCOL

Communication

The source data sheet lists RS485 and RS232 communication interfaces with ModBus, NMEA-0183 and ASCII protocols. Supply voltage is DC 7–30 V, with a stated current of 130 mA at 12 V.

MULTI-PARAMETER CUSTOMIZABLE

Supports over 10 types of sensors to satisfy different needs



Radiation

(UV, Light Intensity, Total Radiation)



Wind Speed

(Wind Speed, Wind Direction)



Rainfall

(Tipping Bucket, Optical, Radar)



Atmospheric Conditions

(Temperature, Humidity, Pressure, Noise, PM)



Gases

(Carbon Monoxide, Carbon Dioxide, etc.)



SS206-09 Radar Rain Sensor

Configuration & Support Summary

- 24 GHz Doppler radar measurement.
- 0.1 mm resolution; 1 Hz sampling.
- RS485 / RS232 with three listed protocols.
- Aluminum alloy + ABS construction.

CONTACT / SUPPORT

SpeSense Technologies Inc.

Add: No. 9 Yuhe Road, Guitang Subdistrict, Yuhua District, Changsha City

Tel: +86-15386478166

Email: info@spesense.com

Web: www.spesense.com



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