

PRECIPITATION MONITORING / DATA SHEET

SS206-08

Piezoelectric Rain Sensor

Impact-based rainfall measurement for continuous online precipitation monitoring.

Overview

- Measures raindrop impact and calculates continuous rainfall.
- Integrated stainless-steel design with RS-485 output.



SUPPLY DC 9–12 V	ACCURACY <±5%	RESOLUTION 0.1 mm	OUTPUT RS-485
Key Advantages • All-solid-state construction with no mechanical accessories. • Weather-resistant, corrosion-resistant and waterproof construction. • Maintenance-free operation; no on-site calibration required.		Application Scenarios • Meteorological and hydrological stations. • Flood control, water supply and reservoir management. • Agriculture and forestry precipitation measurement.	

MEASUREMENT PRINCIPLE

Technical Principle

The webpage describes an impact measurement principle: the sensor measures the impact of an individual raindrop, relates the impact to the raindrop momentum using $P=mv$, and calculates continuous rainfall. The piezoelectric construction has no mechanical accessories and is described as durable, sensitive, reliable and maintenance-free, with low power consumption, strong resistance to external interference and all-weather operation.

SYSTEM DATA

Technical Specifications

Item	Specification
Power supply	DC 9–12 V
Accuracy	<±5%
Resolution	0.1 mm
Operating temperature	–40 °C to +80 °C
Sampling period	10–600 s
Signal output	RS-485
Signal cable length	3 m; customizable

Sensor-end interface	Integrated sensor and signal cable; no interface
Cable configuration	4-core connection
Construction	Integrated stainless-steel, all-solid-state design
Mounting accessories	Screw accessories; quantity: 2
Installation height	500–600 mm from the ground or ship deck

ORDERING INFORMATION

Product Selection

Code	Description
SS206-08	Piezoelectric rain sensor

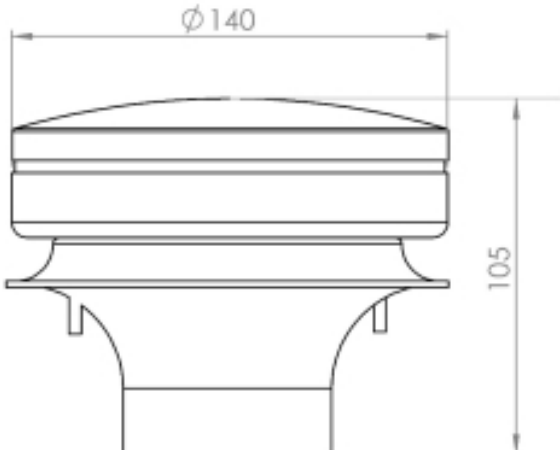
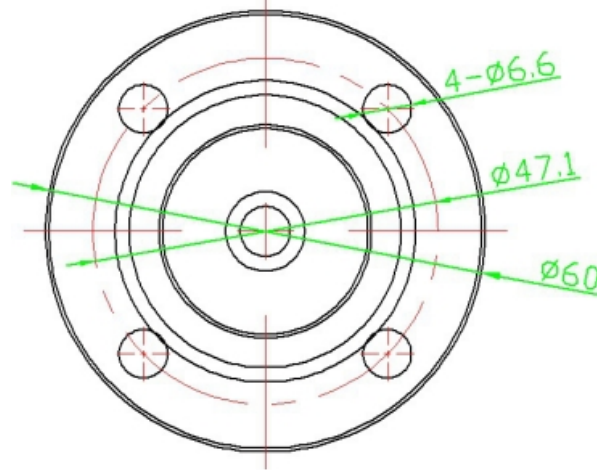
CONFIGURATION NOTE

The supplied webpage identifies RS-485 output with an integrated 4-core signal cable. The cable is 3 m long and can be customized; the sensor end has no separate interface.

MECHANICAL DATA

Mechanical Dimensions & Structure

The two supplied webpage drawings are retained as editable figures. The webpage text specifies the overall dimensions and the mounting-flange dimensions listed below; where drawing labels differ, the webpage text is used as the controlling specification.

Overall Dimension	Mounting Flange
	

SOURCE DIMENSIONS

Overall diameter: ϕ 140 mm; overall height: 105 mm. The webpage text specifies a ϕ 65 mm mounting flange with four ϕ 6 mm mounting holes.

ELECTRICAL CONNECTION

Wiring Instructions

The wire colors and functions below are translated from the webpage RS-485 connection definition. The webpage lists the red conductor as 12 V, black as GND, yellow as 485A and blue as 485B.

Wire color	Function	Wire color	Function
Red	12 V supply	Yellow	RS485-A
Black	GND	Blue	RS485-B

SIGNAL NOTE

The general supply specification is DC 9–12 V; the source wire definition identifies the red conductor as 12 V. Verify the ordered supply and wiring before energizing the sensor.

INSTALLATION & OPERATION

Installation Notes

- Install the rain sensor on a bracket 500–600 mm above the ground or ship deck.
- Choose an open installation area and keep surrounding obstructions to a minimum.
- Keep the sensor away from vibration sources.
- Install the supplied M6 screw accessories at the bottom for fixed installation.



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Configuration & Support Summary

- Impact-based rainfall measurement with continuous online monitoring.
- 0.1 mm resolution, 10–600 s sampling period and 3 m customizable cable.
- RS-485 output with integrated 4-core signal cable.
- Stainless-steel, all-solid-state construction for weather-exposed use.

CONTACT / SUPPORT

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