



≥ 7.5 cm diameter solid precipitation measurement

Up to 25 impacts per second

Heavy duty materials

Maintenance free sensor

Description

The HT sensor is a very low-power, maintenance-free, totally sealed and mechanically ultra-robust acoustic instrument with no mobile parts. It is able to detect hailstones between 0.5 and 7.5 cm diameter and will survive the most extreme hail events. The sensible element of the sensor is a three layer polished stainless disc supported by an unbreakable stainless-steel arm. Impacts of hailstones (or any other lithometeors in the same range of kinetic energy) induce a measurable change in internal acoustic pressure.

It features continuous or pulse analog voltage out-puts and supports SDI-12 communication and serial RS-232. The full configuration of the sensor can be customized at any time with a Plug-and-Play PC connection or remotely, using serial commands.

The sensor is provided with mounting kit and 3m signal cable.



Main Features

- **Low-power sensor**
- **Heavy duty materials**
- **Easy installation**

Technical Specifications*

Measurement Performance	
Solid Precipitation	15 classes, from 0.5 cm (minimal detectable diameter) to ≥ 7.5 cm (possible saturation of the instrument)
	Counting of the number of hailstone impacts up to 25 impacts per second
Accuracy	Typical response $\pm 10\%$
Operating Conditions	
Temperature	$-40^{\circ}\text{C} \div +80^{\circ}\text{C}$
Humidity	$0\% \div 100\%$
Outputs	
Analog	0-2.5V
Serial	SDI-12, RS232
Mechanical Specifications	
Materials	Stainless steel and aluminium Ematal anodized (breakdown voltage $> 40 \text{ V}/\mu\text{m}$)
Weight	3.2 kg without mounting kit 5.4 kg with mounting kit
Dimension (H x W x D)	260 mm x 450 mm x 200 mm (with mounting kit)
Installation	Universal mounting kit provided
Protection class	IP68
Ordering codes	
RS485-Modbus	PSM-t066-HT

*Changes on technical performances can be applied upon request of specific calibration