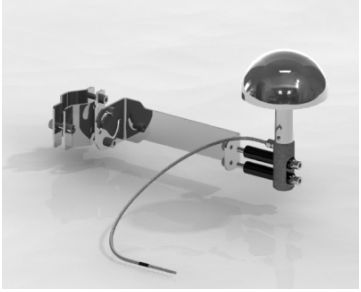

Rain sensor RHD

Extremely robust and reliable acoustic RAIN sensor

The RHD is a low-cost, high precision and ultra-robust rain sensor. It features very low-power consumption, is maintenance-free and has a completely sealed acoustic detector with no moving parts. The sensing device is a polished stainless steel hemisphere supported by a strong stainless steel arm. It detects changes of the acoustic pressure that are induced by the impact of raindrops or hailstones. The RHD also includes a distrometer that returns the drop size distribution.

Fields of application

With its disdrometer and hail detection functions the RHD is a valuable instrument for soil erosion forcast and precipitation monitoring in agriculture. As this sensor is maintenance free, it is also suitable for remote weather stations (on- and offshore) and scientific research.

Technical details

- **Measurement principle** acoustic detector
- **Measurement area** hemisphere with Ø160 mm (402 cm²)
- **Accuracy of rain intensity** ± 15% at 100% duty-cycle
- **Disdrometer** 27 size classes from ? 0.75 mm to ? 7.0 mm
- **Hail detection** hail stone size ? 0.5 cm; up to 5 hits/second
- **Output** RS-232, SDI-12, impuls- und voltage output, Modbus RTU (requires adapter)
- **Protection** IP 67
- **Temperature range** -30°C bis +60°C
- **Dimensions** 260 mm x 430 mm x 160 mm (including mounting arm)
- **Mounting** mast or crossbar