Hail sensor

Extremely robust and reliable acoustic hail sensor

The HDI sensor measures the impact of individual hailstones on a stainless-steel disc using a special acoustic detector, signal processing and calculation. The sensing surface is a 200 mm diameter omnidirectional head, containing the electronics of the system.
The HDI can detect hailstones between 0.5 and 7.5 cm and up to 25 hits per second. Comparable to so-called disdrometry, it can distinguish between 15 size-classes. The size distribution is reported as percentage of all detected impacts according to classification table.

Hail sensor hdi

The hail sensor HDI is shipped with a robust, stainless steel mounting arm. With the included USB-converter the sensor can be directly connected to a PC and configured for your needs.

Fields of application

The HDI is the sensor of choice wherever damage by hail is of concern: farming on fields and in greenhouses, infrastructure like facades, roofs and soloar panels or vehicles.

Technical details

- **Measurement principle** acoustic detector
- **Measurement area** Ø200 mm
- **Range** hail stone size 0.5 ... 7.5 cm; up to 25 hits/second
- **Disdrometer** 15 size classes
- **Output** RS-232, SDI-12, impuls- und voltage output
- **Protection** IP 67
- **Temperature range** -30°C bis +60°C
- **Dimensions** 260 mm x 450 mm x 200 mm (including mounting arm)
- **Mounting** mast or crossbar

Hail watcher

SOMMER provides Plug & Play monitoring station that does not reuqire any technical background knowledge. The Hail Watcher is shipped completely assembled and can be mounted right out of the box.
The included data logger (MRL-7B) collects the hail data and transfers them via mobile internet to the SOMMER Cloud or a server of your choice.

Fields of application

The Hail Watcher is the instrument of choice wherever damage by hail is of concern: farming on fields and in greenhouses, infrastructure like facades, roofs and soloar panels or vehicles.

The hail detection station includes:

- HDI Sensor
- Datalogger MRL-7B
- Modem
- Battery
- Solar panel
- Mounting brackets

Options:

- International SIM card
- Mast with foundation

Technical details

- **Protection** IP 67
- **Dimensions** 750 x 240 x 360 mm
- **Mounting** mast or crossarm