**Fine dust sensor**

The SDS011 sensor. this measures the fine dust particles PM10 and PM2,5 in the intake air.

* information

price: less than 50 euros

It uses a laser detector.

The sensor is used in a number of projects and increasingly by citizens.

* how does the sensor work

A small fan in the device draws in air.

The intake air passes through a beam of light.

A detector measures the scattering of light on the fine dust.



advantage

+ Different models are available cheaply

+ They are easily available online

+ Various existing civil science projects use particulate matter sensors

+ Most particulate matter sensors are easy to use

disadvantage

- In humid weather, most particulate matter sensors overestimate the concentrations of particulate matter, because they detect certain water particles in the air as particulate matter

- The specifications of the sensors are not always clear