

# FINE DUST SENSOR

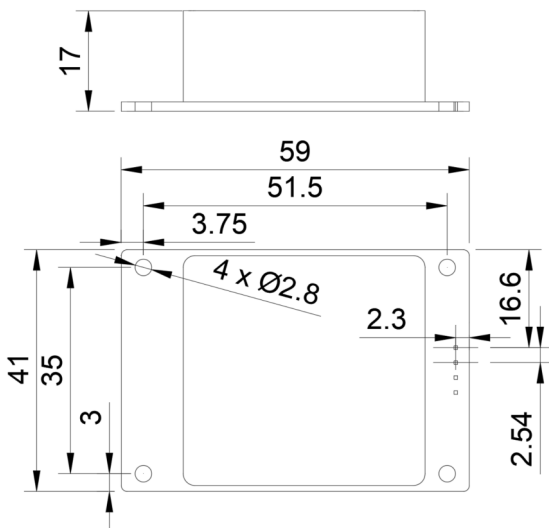
for measuring the concentration of fine dust in the air



The HM3301 particulate matter sensor is designed to measure particulate matter concentrations in ambient air. Using an optical backscatter method, the module measures particle levels and outputs the PM1.0, PM2.5 and PM10 particulate matter mass concentrations in  $\mu\text{g}/\text{m}^3$ .

The measured values can be recorded continuously and transmitted to a connected microcontroller via the I<sup>2</sup>C interface. This makes the sensor ideal for air quality measurements, environmental monitoring, indoor air analysis, as well as microcontroller and IoT Projects.

Thanks to its compact design and digital interface, the module can be easily integrated into existing systems. After a short start-up time, the sensor provides current measurement data for further processing, display or logging.



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## MAIN FEATURES

Interface	I <sup>2</sup> C (0x40)
Operating voltage	3.3 V / 5 V
Weight	37 g
Dimensions	41 x 64,5 x 17 mm
Scope of delivery	HM3301 Fine dust sensor

## OTHER SPECIFICATION

Resolution	Concentration: 1 $\mu\text{g}/\text{m}^3$
Output PM mass concentrations	PM1.0, PM2.5, PM10
PM2.5 measurement range	1 - 500 $\mu\text{g}/\text{m}^3$ (Effective range)  up to 1000 $\mu\text{g}/\text{m}^3$ (Maximum range)
Start-up time	30 seconds after switching on

## OPERATING INFORMATION

Operating temperature	-10 to 60 °C
Operating humidity	10% to 90% relative humidity (non-condensing)

## MORE DETAILS

Article number	SEN-HM3301
EAN	4250236823843
Customs tariff number	90268020