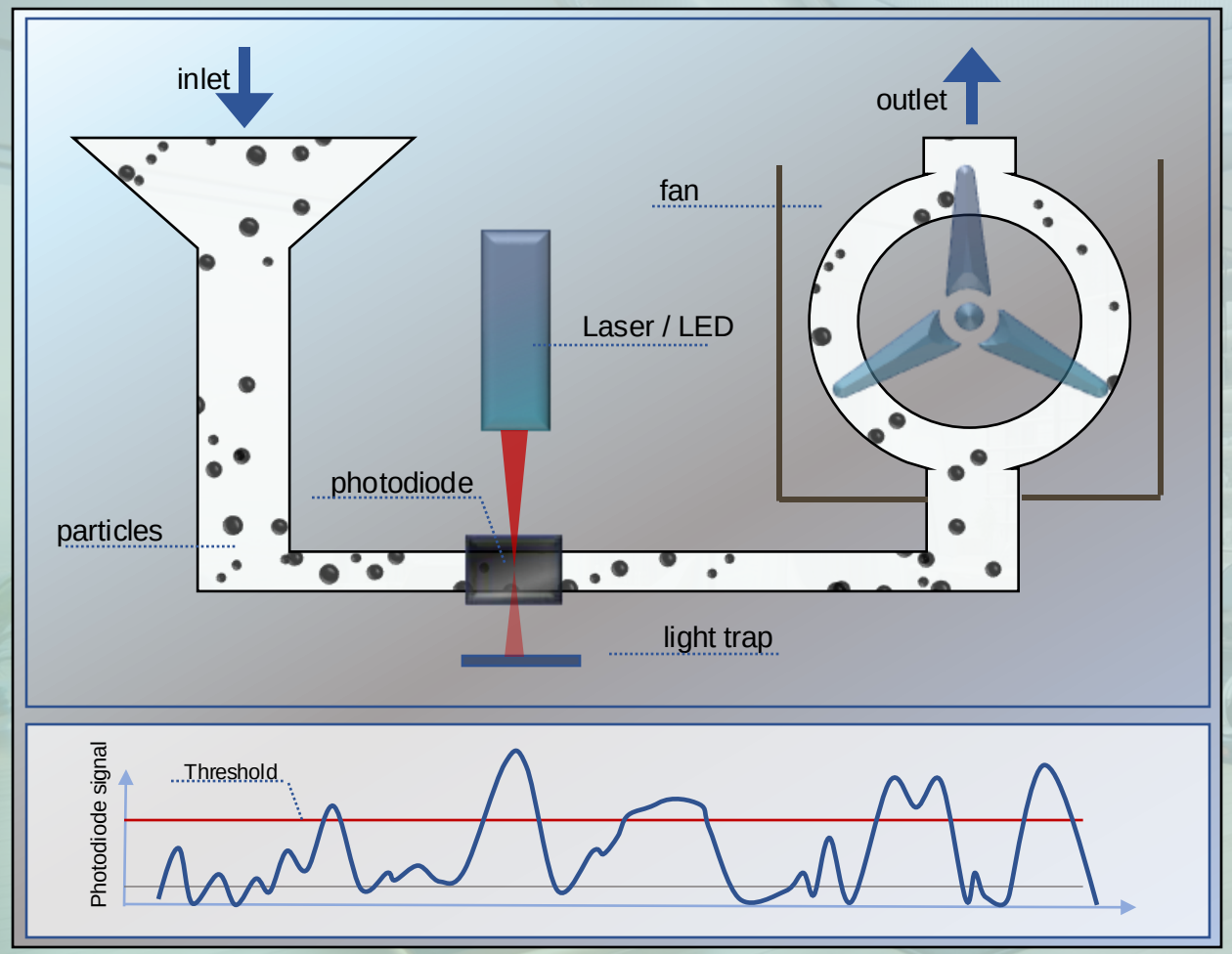
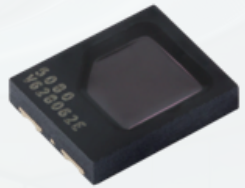
Features to Function

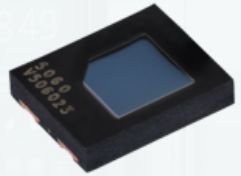
PM2.5 Air Quality Measurement with Photodiodes



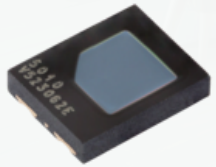
Particulate Matter 2.5 (PM2.5) refers to fine particles with a diameter of less than 2.5 micrometers, 30 times smaller than a human hair. Due to their tiny size, PM2.5 particles can penetrate deep into the lungs, this can lead to a variety of serious health issues.



VEMD5010X01
Photodiode
Peak Sensitivity: 940 nm



VEMD5060X01
Photodiode
Peak Sensitivity: 850 nm



VEMD5080X01
Photodiode
Peak Sensitivity: 950 nm

Working Principle: Vishay's photodiodes are a popular choice for air quality measurements. Based on the principle of light scattering, air particles will reflect light depending on their size and quantity. This reflection is detected by our highly sensitive photodiodes and can be used to determine the level of air pollution, such as PM1.0, PM2.5, or PM10. Depending on the design and laser source used, we offer different photodiodes with peak wavelengths ranging from 850 nm to 950 nm.

Datasheet

Infographic

