

PM2.5 Air Quality Kit (PMSA003 + SHT20)



Description

PM2.5 is a pollution sensor base with affordable price and high performance. Integrated with PMSA003 and SHT20, makes it possible to measure the ambient quality of air, temperature, and humidity all at one device.

Much discussion and research have taken place within academic and government environmental organizations as to how accurate such sensors are and whether they have a place in the enforcing of environmental regulation, or even providing an indication of air quality trends to citizens.

With M5Stack product series, the system makes it much easier to deploy the measurement node all around the city and make it possible to build a complete ecosystem from regulation enforcement to citizen indication.

With regards to PMSA003, it is a digital universal particulate concentration sensor designed by using the principle of laser scattering method. It is capable of continuous acquisition and computing the number of suspended particles in per unit volume which is also the particulate concentration distribution. Then turn it into mass concentration and output through digital GPIO.

- Precise measurement implemented by laser scattering method.
- Digital output, standard UART communication
- 0 error alarm rate
- real-time response
- continuous acquisition
- Minimum particle size resolution: 0.3 μm
- Pattern structure design, 6-sides full dimension cover, high antijamming capability
- Alternative in-outlet direction, wide application scale. users no need to redesign the air flue.
- Tiny body, 12 mm. good for portable and wearable device

SHT20 is a Humidity and temperature sensor IC.

- Fully calibrated
- Digital output, I2C interface
- Low power consumption
- The excellent long term stability



Product Feature

- DC 5V
- Compatible with M5stack stackable and extension system.
- M5Core pedestal (Pin out SPI/I2C/Power)
- Proto board
- USB Type-c port

Package Includes

- 1x PM2.5 base
- 1x M5Stack Basic
- 1x M5Core pedestal
- 1x Type-c cable

- 2x M3 screw