PM2.5 Air Quality Kit SKU:K014

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 humility 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 UARTcomunication
    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
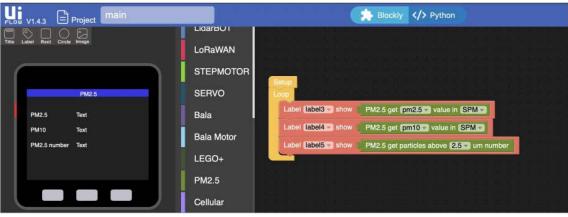   1x Type-c cable
    2x M3 screw

EasyLoader

EasyLoader是一个简洁快速的程序烧录器，其内置了一个产品相关的案例程序，通过简单步骤将其烧录至主控，即可进行一系列的功能验证.(程序烧录前，请根据设备类型安装相应驱动程序. M5Core型主机请点击此处查看CP210X驱动安装教程, M5StickC/V/T/ATOM系列可免驱动使用)

Learn

Datasheet

SHT20

PMSA003

Example

Arduino

Use with Arduino, please click here

UIFlow

Schematic

PM2.5