

NANOMESHER has a passion and mission in promoting R&D for youngsters. With the massive popularity in STEM now, we have now put together a STEM Toolkit for students to do their own IOT projects by utilising the Arduino Platform.

This IOT Kit was successfully funded on Kickstarter back in July 2017.

The toolkit includes the necessary hardware, code and guide to build these projects. A color printed guidebook published by Nanomesher is included.

BUILDING

For each of the projects, you can choose to build in 2 ways. The code are exactly the same in either way.

- The traditional way - using the Wemos D1 dev board / breadboard and jumper wires
- The easy way - just plug the components onto the **Nanomesher HMI development board**

We have specifically designed the Nanomesher HMI development board to fit our selected sensors and displays. The aim is for you to spend the least amount of time fiddling with wires and soldering and to maximize the learning and building of the software's functionality.

SPECIFICATION

Development Board:

- Wemos D1 R2 Development Board
- Nanomesher HMI Development Board (onboard Wemos D1 mini)

Output:

- Piezo Buzzer
- Assorted LEDs

Display:

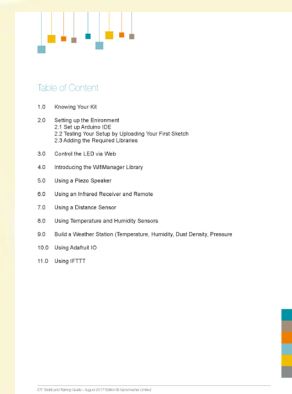
- High Contrast OLED 0.96 inch Display

Sensors:

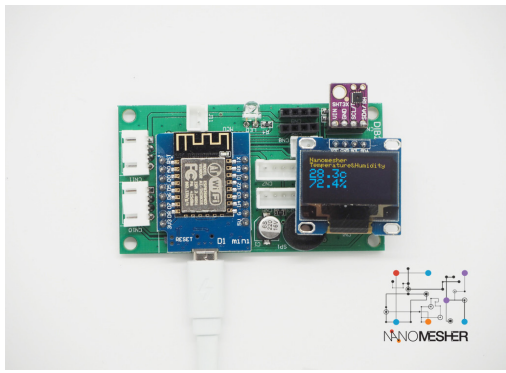
- Infrared Receiver
- Ultrasonic Distance
- PM2.5 Dust Particles
- Temperature and Humidity
- Atmospheric Pressure

Guide:

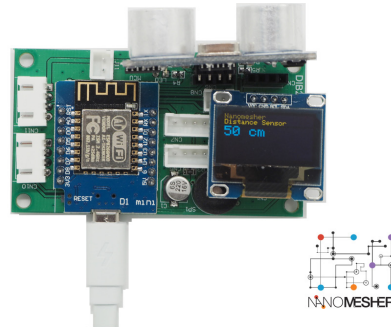
- Project Guide Book



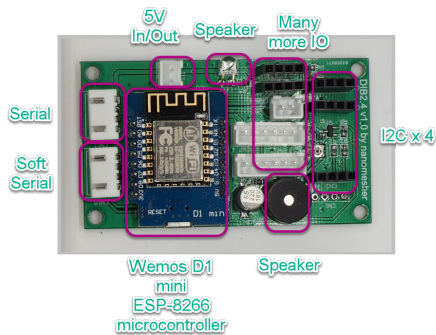
EXAMPLE PROJECTS



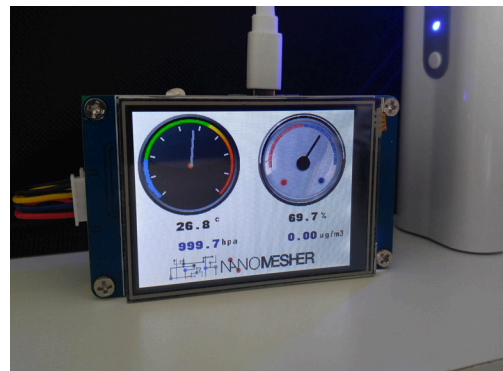
Temperature and Humidity Sensors



Ultrasonic Distance Sensors



NANOMESHER Wireless HMI Dev Board



Displaying on Nextion HMI Display

STEM IOT Dev & Sensor Took Kits comes in 3 Options :

- IOT Development and Sensors Kit - Standard
- IOT Development and Sensors Kit with 2.4" HMI
- IOT Development and Sensors Kit with 3.2" HMI

