Part Number: XK01

Description: STEM Starter Kit

The STEM Starter XK01 includes sensors for temperature, humidity, pressure, visible, UVA and UVB light. A Wi-Fi Core xChip (ESP8266), mini-OLED display, spacer chip, connectors and a programming interface (which also acts as a USB power source) complete the device.

Kit contents

1 x CW01 - Wi-Fi Core (ESP8266/ESP-12F)
1 x IP01 - USB Programming Interface (FT232R)
1 x OD01 - OLED Display 128x64 (SSD1306)
1 x MD01 - Blank
1 x SL01 - UVA, UVB, Light (VEML6075 & TSL4531)
1 x SW01 - Advanced Weather Sensor (BME280)
1 x XC10 - 10-Pack xBUS Connectors

How it works

1. **Ready to load Arduino code**: supplied bin file give you everything needed to make an indoor environment monitor in minutes. This includes access to a free [Kibana data dashboard](#) and our [MQTT server](#) to send your data to any cloud service. Please see [Getting Started Guide](#), which includes instructions on how to assemble the kit, load and configure the Arduino code, allowing the kit to connect to Wi-Fi, our free dashboard and the cloud.

2. **Arduino IDE**: supplied Arduino sketch allows users to customise their own weather station and MQTT server, and use our sample code, projects and tutorials.

3. **Azure IoT**: connect easily with our Azure Certified xChip Core CW01, supporting tutorial on Microsoft's website.

4. **Ubidots IoT platform**: connect with [Ubidots](#), with tutorials and code provided, displaying IoT data and with analytics and alert functionality. See [this tutorial](#) to start.

5. **Blynk IoT app**: connect with [Blynk](#), tutorials and code provided, benefits as above with Ubidots.