

## Building an IoT Monitoring System > Building your first IoT Sensor Project

## More on ADC with the Bolt WiFi module

The Bolt WiFi module is designed around the ESP8266 WiFi chip by the company Espressif and uses its internal hardware for all of the functions of the Bolt.

The ADC that comes inbuilt with the ESP8266, has an input range of 0 to 1 volts, and an output range of 0 to 1023.

The voltage reading given by the output of the ADC can be given by the following formula.

Input Voltage = ADC output / 1024

So, if you see a reading on of 512 or 256 on the device view on the Cloud dashboard, it means that the Bolt sees a voltage of 0.5v, 0.25v respectively at the A0 pin.

Can you guess what values would be produced by a voltage of 0.2, and 0.8 volts? Try calculating the ADC output for these voltage values as an exercise.