***Adafruit BME680 (Temperature/humidity/Gas Sensor) - NO LONGER USABLE***

**VDD** - 3.3V or 5V

**Communication** : SPI or I2C

**Price** - $22.50

**Features** - temperature,humidity, barometric pressure, detects alcohol/gasses & perform air quality measurements

**Notes** - Gives one resistance value for VOC (Volatile organic Compound), VOC sensor needs to be “burn in” run for 48 hrs

**Link** - <https://blog.adafruit.com/2017/11/09/new-product-adafruit-bme680-temperature-humidity-pressure-and-gas-sensor/>

***Adafruit Si7021 (Temperature / Humidity Sensor)***

**VDD** - 3.3V or 5V

**Communication** - I2C

**Price** - $11.70

**Features** - Temperature and Humidity Sensing

**Notes** - Need to deal with level shifting and pull up resistors due to using multiple I2C sensors

**Info Link** - <https://www.adafruit.com/product/3251>

**Purchase Link** - <https://www.amazon.com/gp/product/B01M0BJ139/ref=oh_aui_detailpage_o00_s00?ie=UTF8&psc=1>

***Adafruit TSL2561 (Light sensor)***

**VDD** - 3 - 5V

**Communication** : I2C

**Price** - $6

**Features** - detect light up to 0.1 to 40,000 + LUX, can separately measure infrared/full spectrum or human visible light

**Notes** -

**Link** - <https://www.adafruit.com/product/439>

***PIR motion sensor***

**VDD** - 5V

**Communication** : Digital output

**Price** - $12

**Features** - detect up to 22ft

**Notes** - can bypass the regulator with soldering to use 3v

**Link** - <https://www.adafruit.com/product/189?gclid=Cj0KCQiAp8fSBRCUARIsABPL6JYwVbec0hARRUYe_kFvCRdmOzHtNvbr7TDMaDpS33itxNP4EDUq_zYaAruqEALw_wcB>

* Currently still looking for a motion sensor that uses I2C or SPI
  + Couldn’t find one that uses those connections

***HDMI Cable***

Price - $3.99

Link - <https://www.amazon.com/gp/product/B0181YAZKQ/ref=oh_aui_detailpage_o02_s00?ie=UTF8&psc=1>

***BreadBoard Jumper Wires / Connectors***

<https://www.amazon.com/gp/product/B01EV70C78/ref=oh_aui_detailpage_o04_s00?ie=UTF8&psc=1>

Price - $9.99

***Raspberry PI 3***

<https://www.amazon.com/Raspberry-Pi-RASPBERRYPI3-MODB-1GB-Model-Motherboard/dp/B01CD5VC92/ref=sr_1_4?ie=UTF8&qid=1515544978&sr=8-4&keywords=raspberry+pi+3>

Price - $37

***Raspberry PI extension board***

<https://www.amazon.com/SunFounder-Breakout-Expansion-Raspberry-Adapter/dp/B00NGFJSS6>

Price - $10

***Power Supply***

Example power supply: <https://www.amazon.com/Logisys-480W-4-pin-Power-Supply/dp/B000F0DUT8>

Price range - $20.99

**Rough estimate of total** - $115