Sensor Array v1.0 Parts List

Bellevue Satellite Club

Written by Dan Ruder, 1/31/2015

danruder@outlook.com

# Introduction

The following parts are necessary to assemble the sensor boards. The *Description* column contains links to information pages for each part, and from that page, you can get the corresponding data sheets if you are interested. Generic items like capacitors can be substituted between different manufacturers as long as the physical and electrical characteristics are identical.

Note: This parts list does not include the wire connectors that will be used to connect the completed sensor board to the Flight Controller board; those wire connectors are included with the Flight Controller board’s parts list.

## Temp and Humidity Sensor Board

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Data Sheet** | **Manufacturer’s Part Number** | **Quantity** |
| Printed circuit board (PCB) |  |  | 1 |
| [Analog temperature sensor](https://www.sparkfun.com/products/10988) |  | TMP36 | 1 |
| [Analog humidity sensor](http://www.mouser.com/Search/ProductDetail.aspx?qs=yJVtgANCw02R8ZNZHFu0Hg==) |  | HIH-4020-002 | 1 |
| [0.1 uF Ceramic capacitor](http://www.mouser.com/ProductDetail/AVX/SR155C104KAR/?qs=sGAEpiMZZMt3KoXD5rJ2N4odJgq0uv%2f9fQwzcreMleI%3d) (2.54mm/0.100” lead spacing) |  | SR155C104KAR | 1 |
| 26 ga stranded wire – red |  |  | 8” |
| 26 ga stranded wire – black |  |  | 8” |
| 26 ga stranded wire – blue |  |  | 8” |
| 26 ga stranded wire – green |  |  | 8” |

## Analog Light Sensor

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Data Sheet** | **Manufacturer’s Part Number** | **Quantity** |
| [Adafruit Analog light sensor](http://www.adafruit.com/product/1384) (GA1A1S202WP) |  | 1384 | 1 |
| 26 ga stranded wire – red |  |  | 8” |
| 26 ga stranded wire – black |  |  | 8” |
| 26 ga stranded wire – green |  |  | 8” |

## Analog UV Light Sensor

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Data Sheet** | **Manufacturer’s Part Number** | **Quantity** |
| [Adafruit Analog UV light sensor](http://www.adafruit.com/product/1918) (GUVA-S12SD) |  | 1918 | 1 |
| 26 ga stranded wire – red |  |  | 8” |
| 26 ga stranded wire – black |  |  | 8” |
| 26 ga stranded wire – blue |  |  | 8” |