Original Design

Requirements Part Name Arduino Adunio Board

LEDs LED
Tempature Sensor TMP36
Humidity Sensor HIH 4030

Pressure Sensor HSCDANN015PAAA5

Accelrometer SEN-09269

Dataloggers SparkFun OpenLog Micro SD Card Transcend 4GB

Arduino Sheild PCB N/A

9 Volt Battery 9 Volt Battery Rocker Switch Rocker Switch

Totals

Phase 2 Design

Requirements Part Name Arduino Adunio Board

LEDs LED
Tempature Sensor TMP36

Int. Temp and Humidity at BME280 ADAFRUIT
Accelrometer Adafruit MMA8451
Dataloggers SparkFun OpenLog
Micro SD Card Secueye. 64gb

Arduino Sheild PCB N/A

9 Volt Battery 9 Volt Battery Rocker Switch Rocker Switch

Totals

Link	Quantitiy	Weight (grams)	
<u>ArduinoLink</u>		1	25
<u>LedLink</u>		6	1.2
TempSensorLink		2	0.4
<u>HumiditySensorLink</u>		1	1
PressureSensorLink		1	1
<u>AccelrometerLink</u>		1	1.5
<u>DataloggerLink</u>		1	10
MicroSDLink		1	4.5
AnyPCB manafactuer		1	20
BatteryLink		1	45
RockerLink		1	5

114.6

Avg Power Consumpution

Link	Quantitiy	Weight (grams)	
<u>ArduinoLink</u>		1	25
LedLink		6	1.2
<u>TempSensorLink</u>		1	0.2
<u>TempHumidityPressureLink</u>		1	1
AccelrometerLink		1	1
<u>DataloggerLink</u>		1	10
MicroSDLink		1	4.5
AnyPCB manafactuer		1	20
<u>BatteryLink</u>		1	45
RockerLink		1	5

107.9

Avg Power Consumpution

Power Consumption (Amps)	Price)	Avalible?
0.075	\$	27.60	Yes
0.12	\$	0.90	Yes
0.0001	\$	2.84	Yes
0.0002	\$	19.00	No
0.037	\$	37.47	Yes
0.00032	\$	16.95	Yes
0.06	\$	16.95	Yes
0.03	\$	10.00	Yes
0	\$	1.00	Yes
0	\$	4.46	Yes
0	\$	9.99	Yes
0.32262	\$	147.16	

1.6131 watts

Power Consumption (Amps)	Price		Avalible?
0.075	\$	17.00	Yes
0.12	\$	0.90	Yes
0.00005	\$	1.42	Yes
0.0002	\$	14.95	yes
0.000016	\$	7.95	Yes
0.06	\$	16.95	Yes
0.03	\$	10.00	Yes
0	\$	1.00	Yes
0	\$	4.46	Yes
0	\$	9.99	Yes

0.285266 \$ 74.63

1.42633 watts