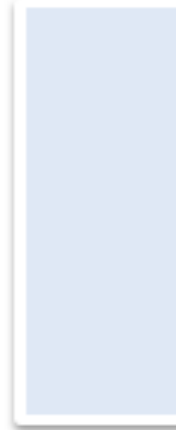


Class 1MCT1
 First Name: Tim
 Name Ramon
 Project Name : Deco meter
 Assembly Revision :
 Approval Date :
 Part Count : 20
 Total Cost : €238

Part #	Part Name	Description	Revision	Qty
1	Raspberry Pi 4 model B	Raspberry pi to control entire system	1	1
2	Raspberry Pi T-cobbler	Breakout board for Raspberry Pi	1	1
3	SparkFun Sound Detector	Measures the decibel level	1	1
4	M5STACK CO2L Unit - SCD41	Measures the CO2, Humidity and Temperature level	1	1
5	Rotary encoder		1	1
6	Breadboard supply 5V and 3.3V, external power supply + Breadboard and cables	breadboard and cables	1	1
7	LCD 16X2	Main screen of the box	1	1
8	PCF8574	control the lcd through I2C	1	1
9	MCP3008	reads the analog value of sound detector envelope	1	1
10	Potentiometer	to control brightness of LCD	1	1

11	Push button	used for multiple controls	3	3
12	LED's (Red)	Used in the encasing	2	2
13	Resistor (in this case I use(Q470)	used in combination with leds and buttons	5	5
Total			20	



(picture can only be added with END delivery of pro

Supplier	also available from	Units	Unit Cost
https://www.amazon.com.be/-/nl/RPI4-MODBP-8GB-Raspberry-Pi-model-GB/dp/B09TTKT94J/ref=asc_df_B09TTKT94J/?tag=be-ggshnadd0d-	https://www.reichelt.com/be/nl/raspberry-pi-4-b-4gb-incl-12-mp-camera-rpi4-bd2-4gb-m12-n353330.html?&trstet-pos_2	1	\$ 141,99
https://nl.banggood.com/40-Pin-T-Type-GPIO-Adapter-Expansion-Board-For-Raspberry-Pi-3-or-2-Model-B-or-B+-or-A+-or-Zero-p-	https://www.amazon.com.be/-/en/Adafruit-Assembled-T-Cobbler-Plus-Raspberry/dp/B00QG4X0DK/	1	\$ 8,74
https://www.sparkfun.com/products/12642	https://www.vanallesenmeer.nl/Sound-Detector-Sparkfun-12642?gclid=CjwKCAjws7WkRbBFEiwAl168xc2WcGcDPa	1	\$ 11,95
https://www.tinytronics.nl/shop/nl/sensoren/lucht/vochtigheid/m5stack-co2l-unit-scd41	https://shop.m5stack.com/products/co2l-unit-with-temperature-and-humidity-sensor-scd41	1	\$ 48,00
https://www.tinytronics.nl/shop/nl/schakelaars/manuele-schakelaars/rotary-encoders/rotary-encoder-module	https://opencircuit.nl/product/rotary-encoder-20-pulse-met-switch-2-stuks?srsId=AR57-fDV6wFe4YIDtrzrMEdgRTWt	1	\$ 1,50
https://www.itronify.com/breadboard-kit-met-voeding-en-jumper-kabels-140798.html	https://www.bol.com/be/nl/p/azdelivery-mb-102-breadboard-kit-830-breadboard-voedingcentraal-3-3v-5v-	1	\$ 4,89
https://www.hobbyelectronica.nl/product/hd44780-16x2-karakters-lcd-display-module-blauw-backlight/	https://opencircuit.be/product/16x2-karakters-lcd-module-blauw-5v	1	\$ 3,45
https://www.hackerstore.nl/Artikel/377	https://www.reichelt.com/be/nl/remote-8-bit-i-o-expander-voor-i2c-bus-pdip-16-pcf-8571-en-	1	\$ 0,90
https://www.kiwi-electronics.com/nl/mcp3008-8-kanaals-10-bit-adc-met-spi-interface-6222country=BE&gclid=CjwKCAjws7WkRbBFEiwAl168xc2WcGcDPa	https://www.reichelt.com/be/nl/3-lijns-naar-8-lijns-decoder-demultiplexer-dil-16-ls-138-n10612.html?PROVID=2812&	1	\$ 3,95
https://www.hobbyelectronica.nl/product/5k-potentiometer/?srsId=AR57-fBwJiKOV0QGshAEzpnFd77ZDfd4Wy3tmtS4tN7vMrbWblIrAkQl2v7w	https://opencircuit.be/product/5k-ohm-lineaire-potentiometer-2-stuks	1	\$ 0,75

https://be.grandado.com/j-s-momentary-push-button-switch.html?id=93151865	https://www.amazon.com.be/-/en/Gebildet-Pre-Wired-Momentary-3V-6V-12V-24V-230V/	3	\$	3,09
https://www.distrelec.be/nl/led-627nm-rood-mm-kingbright-7113id/p/17501459?srsId=AR57-fBQ_N8VBrionVDKAWk5C	https://www.allekabels.be/led-diode/7369/1064224/led-diode.html?mc=1	25	\$	0,11
https://tecvoordeel.nl/product/weerstand-470-ohm/?utm_source=Google%20Shopping&utm_campaign=too1&utm_medium=op	https://opencircuit.nl/product/470w-metaalfilm-weerstand-1-4w-10-stuks?srsId=AR57-fC1T62PA_k3dYD1Cgi8L_m0n	10	\$	0,49

Picture of Assembly

object!)

Max Cost	Real Cost
€ 141,99	
€ 8,74	
€ 11,95	
€ 48,00	
€ 1,50	
€ 4,89	
€ 3,45	
€ 0,90	
€ 3,95	
€ 0,75	

€ 9,27

€ 0,21

€ 2,45

€ 238,05