

Class	1MCT02
First Name:	Giquardo
Name	Vandaele
Project Name :	<u>Smart Greenhouse</u>
Assembly Revision :	_____
Approval Date :	_____
Part Count :	<u>22,6</u>
Total Cost :	<u>€263</u>

Part #	Part Name	Description	Revision	Qty
1	Raspberry Pi 4 Model B 2GB Ram	Raspberry pi to control the system	1	1
2	sensor DHT11	to measure the temperature	1	1
3	solenoid valve	to water the soil	1	1
4	AC-DC Adapter 12V 2A min: 1000ma	to get power for the light and valve	1	1
5	grow light	light for the plants	1	1
6	5v relay module	to get power to the light and valve	1	1
7	RTC sensor	to know the real time	1	1
8	DC 5,5 mm jack female naar schroefklem adapter	jack female naar schroefklem adapter	1	2
9	Capacitive Soil Moisture Sensor	to know soil humidity	1	1
10	DC 12V splitter cable	female to double male adapter	1	1

11	BH1750 16-bit I2C (OT5287)	to measure the uv light	1	1
12	LCD Screen with i2c	display for IP	1	1
13	3.3 volt to 5 volt level shifter	used for actuators and RTC communication with our pi	2	1
14	jumper cables	used to connect everything	2	1
15	breadboard	for all our connections	2	1
16	button	shutdown button	2	1
17	resistor 1k	used for our button	2	1
18	breadboard power supply	used to power our breadboard	2	1
19	Scala acrylic sheet 100x200 cm 2mm crystal.	to use as glass for the greenhouse	2	1,6
20	Plywood sheet 244x122 cm 18mm basic	used as wood for the casing	2	1
21	Cartri Beam 180x7x2 cm planed pine.	used as pillar in the casing	2	1
Total			22,6	

tronic.nl/nl/lichtintensiteitssensor-bh1750-13E&gclid=CjwKCAjw-b-kBhB-E	1	\$	3,00
c.nl/nl/1602-lcd-blauw-backlight-met-i2c-vo119723827/?Referrer=ADVNL	1	\$	4,70
country=BE&gclid=CjwKCAjw-b-kBhB-EiwA4fvKrAt-4bBQZEm4-kCjbQRmgi	1		4,25
?Referrer=ADVNLGOO002013-S--9300000053100939&gclid=CjwKCAjw-l	1	\$	9,99
e&gclid=CjwKCAjw-b-kBhB-EiwA4fvKrNcaKrQ7D9XETDFsObqSdTdbDd	1		2,99
25302816324978788&hvppone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=8	1	\$	5,59
gclid=CjwKCAjw-b-kBhB-EiwA4fvKrJLrIZ1IirpnfpHqbP5j1S97M9qC0P0Yr	1		0,1
y=&gclid=CjwKCAjw-b-kBhB-EiwA4fvKrEPLbQHx-ttDoxafUr8g2su6gdeRE	1	\$	2,25
m-kristal/125015/?fbclid=IwAR1JL2QeuNz7Tk844WHzklHeZKLG285gJY7	1,6	\$	48,00
l058833/?fbclid=IwAR1opQNezWeRnwjXT06VPMRS44iffIMpO9PQQ1Kiq	1	\$	20,13
-grenen/568196/?fbclid=IwAR2liy_22FwWhbdn8zs9r12dv1j8R5Rwc0uw3t	1	\$	4,29

Max Cost	Real Cost	Personal cost
€ 59,95	€	-
€ 6,49	€	-
€ 9,99	€	9,99
€ 14,79	€	14,79
€ 12,95	€	12,95
€ 4,70	€	4,70
€ 1,75	€	-
€ 6,38	€	6,38
€ 5,15	€	5,15
€ 6,85	€	6,85

€ 3,00	€	3,00
€ 4,70	€	4,70
€ 4,25	-	
€ 9,99	-	
€ 2,99	-	
€ 5,59	-	
€ 0,10	-	
€ 2,25	-	
€ 76,80	-	
€ 20,13	-	
€ 4,29	-	
€ 263,09	€ -	€ 68,51