	details1	details2	details3	quantity	unit price
Common					
Barrel connector		3A	2,1mm int pin	1	0.47
Power supply	12V	5A	2.1mm pin	1	18.65
Custom PCB				1	5
3D printed frame				1	5
Flat ribbon cable	10pin	3m colored	AWG-28	1	1.99
Raspberry pi module					
Capacitor	16V	680µF	Electrolitic	1	0.43
Capacitor	16V	220µF	Electrolitic	1	0.08
Diode	20-60V	3A	Schottky	1	0.18
Inductor	3.6A	33µH	Ferrit	1	0.6
Screw terminal	2pin	6A		1	0.24
Switching volt reg (LM2596)	45V	3A	TO-220-5	1	3.8
Raspberry pi 3	Pi 2 will also work			1	37.5
HDMI cable	0.5m			1	1.55
USB cable	A to micro B			1	1.5
Screws	M3	Head cap	6mm long	4	0.05
Arduino module					
Arduino Nano	Atmega328			1	22.9
socket terminal strip	20 pin	2.54 spacing	8.5mm height	2	0.27
USB cable	A to mini B	0.3m		1	1.95
Peltier module					
H-Bridge (L298N)	Multiwatt 15			1	2.4
Fan	5V	40X40X20		1	7.5
Capacitor	100V	0.1µF	Electrolitic	2	0.04
LED RGB	4V	20mA	4 pin	1	0.58
Resistor	1/4W	220Ohm	carbon film	3	0.11
Resistor	17W	1Ohm	Axial	1	0.97
Resistor	1/4W	270Ohm	carbon film	1	0.11
Resistor	1/4W	1kOhm	carbon film	1	0.11
Transisitor (BC368)	20V	1A	0.8W	1	0.08
Peltier element	15.4V	6A	40X40X4.1mm	1	17.1
Screw terminal	2pin	6A		4	0.24
Heat sink	36X36X12			2	1.15
Temp sensor (AD22100-KT)	TO-92	for negative temps use AT va		1	3.4
Ring + Matrix					
Capacitor	16V	680µF	Electrolitic	1	0.43
Capacitor	16V	220µF	Electrolitic	1	0.08
Diode	20-60V	3A	Schottky	1	0.18
Inductor	3.6A	33µH	Ferrit	1	0.6
Switching volt reg (LM2596)	45V	3A	TO-220-5	1	3.8
Screw terminal	3pin	6A		1	0.36
Screw terminal	2pin	6A		1	0.24
Adafruit neopixel ring	12 LEDs			1	6.71
Adafruit LED matrix	8X8	with backpack	blue	1	10.7

Power LEDs + Servo

Capacitor	16V	680µF	Electrolitic	1	0.43
Capacitor	16V	220µF	Electrolitic	1	0.08
Diode	20-60V	3A	Schottky	1	0.18
Inductor	3.6A	33µH	Ferrit	1	0.6
Switching volt reg (LM2596)	45V	3A	TO-220-5	1	3.8
Resistor	1/4W	270Ohm	carbon film	1	0.11
Transisitor (BC368)	20V	1A	0.8W	3	0.08
LED(violet – High power)	3.9V	350mA	130mW	1	8.79
Resistor(High power)	11W	12Ohm	axial	1	0.65
Reflective collimator	6°	17.5mm	CLP17CR	1	2.33
Heat sink	36X36X12			1	1.15
Excitation filter	Roscolux #381			1	10.2
Emission filter	Roscolux #12			1	10.2
Servo motor	5V		cont. rotation	1	6.99
Screw terminal	3pin	6A		1	0.36
Screw terminal	2pin	6A		2	0.24

TOTAL

Extras

HDMI to VGA dongle	Optional		1	20.99
Red filter (optional)	Roscolux #19		1	17.6
Monitor			1	89.95
Keyboard & mouse set	USB		1	15.95
Soldering iron			1	4.99
Solder	1mm		1	3.2
Thermal paste			1	7.99
Third Hand			1	9.95
Screw driver	3.5mm		1	3.99

TOTAL

Grand total

total

0.47 https://www.reichelt.de/DC-Jacks/LUM-NEB-21R/3/index.html?&ACTION=3&LA=2&AI

18.65 https://www.reichelt.de/Power-Supplies-Fixed-Voltage/MW-GST60A12/3/index.html?&

5 https://github.com/amchagas/Flypi/tree/development/PCB

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1.99 https://www.reichelt.de/Flachbandkabel/AWG-28-10F-3M/3/index.html?ACTION=3&GI

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0.08 https://www.reichelt.de/Elkos-radial-85-C/RAD-220-63/3/index.html?&ACTION=3&LA=

0.18 https://www.reichelt.de/SB-SKE-4F-Dioden/SB-330/3/index.html?&ACTION=3&LA=57

0.6 https://www.reichelt.de/Fest-Induktivitaeten-radial/L-09HCP-33-/3/index.html?ACTION

0.24 https://www.reichelt.de/Screw-terminals/AKL-059-02/3/index.html?&ACTION=3&LA=5

3.8 https://www.reichelt.de/ICs-LM-2000-LM-25576/LM-2596-T5-0/3/index.html?&ACTION

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1.55 http://www.reichelt.de/A-V-Cables-HDMI-mini-micro-HDMI-/AK-HDMI-0-50G-ET/3/inde

1.5 http://www.reichelt.de/USB-Cables/AK-676-AB/3/index.html?&ACTION=3&LA=2&ART

0.2 http://www.screwsandmore.de/en/50-pcs-DIN-912-A2-M3X6.html

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208.19 all prices in euros and most items from the same distributor – which is not the cheapes

20.99 https://www.conrad.de/de/manhattan-hdmi-auf-vga-konverter-1284618.html

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15.95 http://www.reichelt.de/Keyboard-Mouse-Sets/CHERRY-JD-0800DE/3/index.html?&AC

4.99 https://www.reichelt.de/KOLBEN-FP-30/3/index.html?&ACTION=3&LA=446&ARTICLE

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