

BOM

Part name	Quantity
DF45L024048-A – Brushless DC motor	4
Hobbywing FPV XRotor 3110 900KV	1
6s 1300mAh -120C - GNB HV XT60	1
M3 16mm galvanized steel countersunk screw, 100 pack	1
M3 galvanized steel locking washers, 200 pack	1
M3 steel locking washers, 200 pack	1
M3 stainless steel nut, 100 pack	1
PHR-6	8
B6B-PH-K-S	10
VHR-5N	10
Bearings with flange iglidur® M250	200
X-RING 3.63X2.62/NBR70	100
SEN0374	1
Raspberry Pi RTC	1
LT3751	2
LM74500QDDFRQ1	2
BUK9Y8R5-80EX	2
NUCLEO-H723ZG	1
SX1280IMLTRT	1
SKY66122-11	1
B-G431B-ESC1	5
Wheel hub 4mm	4
Raspberry Pi 4 Model B/8GB	1
Raspberry Pi Kameramodul 3	1
Bearings 5mm	6
M3 threaded inserts 3mm, 50 pack	1
APDS-9960	1
TOF400C-VL53L1	1
VL6180 TOF	1
XT60PW-M	1
2-post pillow block, 32mm bore	4
B5P-VH	10
OFFERT finns för nedanstående, se bifogad fil	
OFFERT – BROADCOM AEDB-9140-A13	8

BOM

Distributor

<https://www.nanotec.com/eu/en/products/1786-df451024048-a>
<https://www.elefun.se/p/prod.aspx?v=65193>
<https://www.elefun.se/p/prod.aspx?v=63197>
<https://www.elfa.se/sv/foersaenkt-skruv-foersaenkt-huvud-torx-t10-m3-16mm-paket-med-100-delar-rnd-rnd-610-00397/p/30171826>
<https://www.elfa.se/sv/lasbricka-m3-foerzinkat-stal-bossard-az-2x6x0/p/30071826>
<https://www.elfa.se/sv/lasbricka-m3-stal-bossard-az-2x6x0-cll4880/p/30071831>
<https://www.elfa.se/sv/sexkantsmutter-m3-4mm-rostfritt-stal-rnd-rnd-610-00485/p/30172720?trackQuery=M3%20mutter&pos=1>
<https://www.elfa.se/sv/hylskontakthus-crimpanslutning-uttag-sockel-positioner-2mm-jst-phr/p/14301984?redirectQuery=PHR-610-00485>
<https://www.elfa.se/sv/stiftlist-enradig-rak-6p-kontakt-don-anlutningsdon-positioner-2mm-jst-b6b-ph/p/14301948?itemList=con>
<https://www.elfa.se/sv/crimp-kontakthus-uttag-sockel-positioner-96mm-jst-vhr-5n/p/30021738>
<https://www.igusab.se/iglidur-ibh/flanged-bearings/product-details/iglidur-m250-m?artnr=MFM-0103-02#quantity=100&dimens>
<https://webbshop.teknikprodukter.se/x-ring-3-63x2-62-nbr70-2111395n70>
<https://www.mouser.se/ProductDetail/DFRobot/SEN0374?qs=81r%252BiQLm7BRSXhV57X59YA%3D%3D>
<https://www.mouser.se/ProductDetail/Seed-Studio/103030277?qs=0ISvoLzn4L8soh3xbH07wQ%3D%3D>

<https://www.mouser.se/ProductDetail/Analog-Devices/LT3751IFEPBF?qs=hVxkg5c3xu8wGIOCrd9eEw%3D%3D>
<https://www.mouser.se/ProductDetail/Texas-Instruments/LM74500QDDFRQ1?qs=stqOd1AaK7%252BDaollEn1S7g%3D%3D>
<https://www.mouser.se/ProductDetail/Nexperia/BUK9Y8R5-80EX?qs=5XOdhvmYM0NT76c8T6Twdw%3D%3D>

<https://www.mouser.se/ProductDetail/511-NUCLEO-H723ZG>
<https://www.mouser.se/ProductDetail/Semtech/SX1280IMLTRT?qs=5aG0NVq1C4xuoq8G6ZzdxQ%3D%3D>
<https://www.mouser.se/ProductDetail/Skyworks-Solutions-Inc/SKY66122-11?qs=stqOd1AaK7%252F9zH4JdBCX2A%3D%3D>
<https://www.mouser.se/ProductDetail/511-B-G431B-ESC1>
<https://www.electrokit.com/axelnav-med-klamfaste-4mm>
<https://www.electrokit.com/raspberry-pi-4-model-b/8gb>
<https://www.electrokit.com/raspberry-pi-kameramodul-3-12mp-75>
<https://www.electrokit.com/kullager-5mm>
<https://www.electrokit.com/ganginsats-m3-x-3mm-50-pack>
<https://www.electrokit.com/apds-9960-rgb-och-rorelsesensor>
<https://www.amazon.com/Teyleden-Robot-TOF400C-VL53L1X-Distance/dp/B0CLDKMGZR>
<https://www.tinytronics.nl/en/sensors/distance/vl6180-time-of-flight-tof-distance-sensor>
<https://www.tme.eu/se/details/xt60pw-m/dc-kontakt-don/amass/>
https://eu.robotshop.com/products/servocity-1-side-2-post-pillow-block-32mm-bore_
<https://se.farnell.com/jst-japan-solderless-terminals/b5p-vh-lf-sn/connector-header-5pos-3-96mm-1row/dp/2399164>

<https://uk.farnell.com/broadcom-limited/aedb-9140-a13/encoder-3channel-500cpr-8mm/dp/1161087>

BOM

Distributor Part Number

DF45L024048-A

65193

63197

301-72-632

300-71-826

300-71-831

301-72-720

143-01-984

143-01-948

300-21-738

MFM-0103-02

2111395N70

426-SEN0374

713-103030277

584-LT3751IFE#PBF

595-LM74500QDDFRQ1

771-BUK9Y8R5-80EX

511-NUCLEO-H723ZG

947-SX1280IMLTRT

873-SKY66122-11

511-B-G431B-ESC1

41020172

41017664 - Raspberry Pi

41020240 - Raspberry Pi

41019266

41018554

41013512 – Sparkfun

XT60PW-M

RP-Sct-2151

JST (JAPAN SOLDERLESS TERMINALS) B5P-VH(LF)(SN)

BROADCOM AEDB-9140-A13

BOM

Manufacturer	Mfr Part number	Á price
		818.4
https://www.hobbywing.com/	HW30418005	219
http://www.gaonengbattery.com/	GNB13006S120AHV	442
https://www.elfa.se/sv/manufacturer/rnd/man_rnd	RND 610-00397	21.6
https://www.bossard.com/se-sv/	AZ 3,2X6X0,4	69.7
https://www.bossard.com/se-sv/	AZ S 3,2X6X0,4 / CLL4880 S	83.3
https://www.elfa.se/sv/manufacturer/rnd/man_rnd	RND 610-00485	21.85
https://www.elfa.se/sv/manufacturer/jst/man_jst	PHR-6	1.07
https://www.elfa.se/sv/manufacturer/jst/man_jst	B6B-PH-K-S	5.43
https://www.elfa.se/sv/manufacturer/jst/man_jst	VHR-5N	2.22
https://www.igusab.se/	MFM-0103-02	3.34
		6.2
https://www.mouser.se/manufacturer/dfrobot/	SEN0374	191.48
https://www.mouser.se/manufacturer/seeed-studio/	103030277	1
https://www.mouser.se/manufacturer/analog-devices/	LT3751IFE#PBF	147.09
https://www.mouser.se/manufacturer/texas-instruments/	LM74500QDDFRQ1	16.45
https://www.mouser.se/manufacturer/nexperia/	BUK9Y8R5-80EX	17.94
https://www.mouser.se/manufacturer/stmicroelectronics/	NUCLEO-H723ZG	322.58
https://www.mouser.se/manufacturer/semtech/	SX1280IMLTRT	75.44
https://www.mouser.se/manufacturer/skyworks-solutions/	SKY66122-11	40.48
https://www.mouser.se/manufacturer/stmicroelectronics/	B-G431B-ESC1	208.96
https://www.gobilda.com/	1309-0016-0004	139
https://www.raspberrypi.com/		979
https://www.raspberrypi.com/		369
		15
		95
https://www.sparkfun.com/	APDS-9960	199
https://www.mouser.se/manufacturer/stmicroelectronics/	VL53L1CBV0FY/1	176.32
https://www.st.com/en/imaging-and-photonics-solutions/vl6180.html	VL6180	33
https://www.tme.eu/se/katalog/p,amass_1260/	XT60PW-M	11.21
https://www.servocity.com/	1602-0032	172.29
https://se.farnell.com/b/jst-japan-solderless-terminals	B5P-VH(LF)(SN)	5.21
https://uk.farnell.com/b/broadcom	AEDB-9140-A13	309

BOM

1 Robot Cost Lead time

3273.6 In stock	Notes
219 In stock	BLDC motors for the wheels, compact size, light
442 In stock	Sensored ESC is required if these are used
21.6 In stock	BLDC motor for the dribbler
69.7 In stock	Battery
83.3 In stock	
21.85 In stock	
8.56 In stock	Hall sensor connector for the motor
54.3 In stock	Hall sensor connector for the motor
22.2 In stock	Motor connectors
334 in stock	Price dependent on the amount you buy
620 in stock	Price dependent on the amount you buy
191.48 4 left in stock	9Dof IMU
47.61 In stock	
294.18 In stock	Capacitor charging controller for kicker
32.9 In stock	Reverse polarity protection
35.88 In stock	Mosfet used with the reverse polarity protection
322.58 In stock	If we do not develop our own pcb this microcontroller, ADC, communication, supports micro ros
75.44 In stock	RF Transceiver Long range 2.4 GHz Wireless 1
40.48 In stock	RF Front End OFDM, 863 to 928 MHz, Wi-SUN
1044.8 In stock	Datasheet
556 in stock	
979 In stock	Can be substituted with Raspberry Pi 4 Model E
369 In stock	Needs to be ordered with Raspberry Pi 4 Model E for dribbler assembly.
90 In stock	
95 In stock	
199 In stock	Chosen by UdeA, RGB sensor
176.32 In stock	Chosen by UdeA, could not find from another source
33 In stock	Chosen by UdeA, could not find from another source
11.21 In stock	XT60 PCB connector
689.16 On demand, 1 month delivery time	For extra support for the wheels, compatible with
52.1 In stock	Motor connectors
2472 In stock	Offert från farnell med studentrabatt
12977.25	

BOM