

Designator	Component	Number	Cost per unit - USD	Total cost - USD	Source of materials	Material type
<b>3D printed parts</b>						
frame	frame	1	62.50	62.50	www.hubs.com	SLA Resin
top_swivel	top_swivel	1	7.03	7.03	www.hubs.com	SLA Resin
rotor_gear	rotor_gear	1	14.84	14.84	www.hubs.com	SLA Resin
motor_gear	motor_gear	1	3.36	3.36	www.hubs.com	SLA Resin
tube clamp	tube clamp	1	0.23	0.23	www.hubs.com	SLA Resin
bottom frame	bottom frame	1	6.25	6.25	www.hubs.com	SLA Resin
magnet holder	magnet holder	1	0.78	0.78	www.hubs.com	SLA Resin
cable_ring	cable_ring	1	4.53	4.53	www.hubs.com	SLA Resin
cable_standoff	cable_standoff	1	2.71	2.71	www.hubs.com	SLA Resin
<b>Mechanical components</b>						
slipring	GT1235-S18-Z5529	1	275.00	275.00	https://www.moflon.com	Plastic, metal
swivel	375/22	1	246.00	246.00	https://www.instechlabs.com	Stainless steel
metal_gearmotor	3703	1	43.95	43.95	https://www.pololu.com	Other
magnetic_encoder	3499	1	9.95	9.95	https://www.pololu.com	Other
motor_cable	455-3644-ND	1	1.52	1.52	https://www.digikey.com	Metal, Plastic
radial_magnet	469-1070-ND	1	0.60	0.60	https://www.digikey.com	Neodymium
signal_cable	455-3723-ND4	4	2.91	11.64	https://www.digikey.com	Metal, plastic
axial_magnet	5862K406	3	1.06	3.18	https://www.mcmaster.com	Neodymium
rod	3180T31	1/2 ft	9.92	9.92	https://www.mcmaster.com	Stainless steel
sleeve	50415K54	0.5 m	8.51	8.51	https://www.mcmaster.com	Stainless steel
ball_bearings	7804K119	2	7.03	14.06	https://www.mcmaster.com	Stainless steel
standoff_short	91075A515	8	3.79	30.32	https://www.mcmaster.com	Stainless steel
standoff_long	93655A227	2	5.68	11.36	https://www.mcmaster.com	Stainless steel
washers	92141A008	1 pack	1.53	1.53	https://www.mcmaster.com	Stainless steel
screws 6-32 7/16	91772A149	1 pack	6.82	6.82	https://www.mcmaster.com	Stainless steel
screws M3x10	92000A120	1 pack	6.22	6.22	https://www.mcmaster.com	Stainless steel
screws 2-56 1/4	91772A077	1 pack	6.47	6.47	https://www.mcmaster.com	Stainless steel
screws M2.5x8	92000A105	1 pack	4.74	4.74	https://www.mcmaster.com	Stainless steel
setscrews 2-56 1/8	92311A074	1 pack	13.35	13.35	https://www.mcmaster.com	Stainless steel
<b>PCB</b>						
stator_PCB	stator_PCB	1	20.20	20.20	https://www.pcbway.com	Other
U16	A79623-001	1	29.00	29.00	https://www.omnetics.com	Other
C5	311-3365-1-ND	1	0.18	0.18	https://www.digikey.com	Other
C1 C4	399-8269-1-ND	2	0.43	0.86	https://www.digikey.com	Other
U1	455-1806-1-ND	1	0.83	0.83	https://www.digikey.com	Other
JP2 JP1	455-1809-1-ND	2	0.98	1.96	https://www.digikey.com	Other
C2 C3	490-3261-1-ND	2	0.10	0.20	https://www.digikey.com	Other
R1	541-1888-1-ND	1	0.10	0.10	https://www.digikey.com	Other
U4 U5	BSS138CT-ND	2	0.31	0.62	https://www.digikey.com	Other
Q1	DMP2045U-7DICT-ND	1	0.43	0.43	https://www.digikey.com	Other
R5 R15 R6 R16	P10KGCT-ND	4	0.10	0.40	https://www.digikey.com	Other
IC1	TB6612FNGC8ELCT-ND	1	1.95	1.95	https://www.digikey.com	Other
U14	WM1281CT-ND	1	2.66	2.66	https://www.digikey.com	Other
rotor_PCB	rotor_PCB	1	19.80	19.80	https://www.pcbway.com	Other
U3	A79623-001	1	29.00	29.00	https://www.omnetics.com	Other
LED1	160-1423-1-ND	1	0.30	0.30	https://www.digikey.com	Other
JP3 JP4	455-1809-1-ND	2	0.98	1.96	https://www.digikey.com	Other
C6	490-3261-1-ND	1	0.10	0.10	https://www.digikey.com	Other
U2	AS5030-ATSTCT-ND	1	5.38	5.38	https://www.digikey.com	Other
U6	BSS138CT-ND	1	0.31	0.31	https://www.digikey.com	Other
R4	P1.00KHCT-ND	1	0.10	0.10	https://www.digikey.com	Other
R2 R3	P10KGCT-ND	2	0.10	0.20	https://www.digikey.com	Other
Total cost				923.91		