

Subsea Performance Efficiency in Robotic Applications

Materials List

Stage	Number	Category	Part	Description	Supplier	Part #	URL	Amazon URL	Price/Unit	Quantity	Cost
1	1	Electronics	Arduino Uno Rev3	microcontroller board, 14 digital input/output pins	Arduino	A000066	https://goo.gl/kCnkp5	https://goo.gl/SUrttg	\$ 22.99	1	\$ 22.99
1	2	Electronics	Raspberry Pi 3 - Model B+	64-bit quad core, 1.4GHz, built-in metal heatsink	Adafruit	3775	https://goo.gl/PJtVqa	https://goo.gl/j3fqph	\$ 35.00	1	\$ 35.00
1	3	Electronics	Controllor	Mad Catz F.L.Y.5 Stick for PC	Mad Catz	N/A	N/A	https://goo.gl/LFYcFB	\$ 120.95	1	\$ 120.95
1	9	Lighting	LED Light	10W CREE XM-L L2 LED With 20mm Star Base	Cree	N/A	N/A	https://goo.gl/EKVAY8	\$ 6.99	3	\$ 20.97
1	10	Lighting	LED Voltage Regulator	Converter 4-38V Step-down Voltage Regulator Module	Drok	N/A	N/A	https://goo.gl/4q64xt	\$ 19.35	1	\$ 19.35
1	11	Power	Battery	Multistar 20000mAh 4S 10C Lipo Pack w/XT90	Hobbyking	9067000345-0	https://goo.gl/5gzuxR	https://goo.gl/dwpYR7	\$ 130.10	1	\$ 130.10
1	12	Propulsion	Kort Nozzle	3D printed Kort nozzle (housing) for DT700 motor.	ROVthruster via Amazon	N/A	N/A	https://goo.gl/VttAhK	\$ 44.99	3	\$ 134.97
1	13	Propulsion	Thruster Motor	HexTronik DT750 Brushless Outrunner 750kv	HexTronik via Amazon	N/A	N/A	https://goo.gl/X3uV6b	\$ 20.99	3	\$ 62.97
1	14	Electronics	Brushless Speed Controller	YEP 18A (2~4S) SBEC Brushless Speed Controller	Hobbyking	9351000023	https://goo.gl/8D2Y6b		\$ 12.68	3	\$ 38.04
2	4	Flotation	ABS Plastic Filament	ORANGE 5KG 2.85 mm ABS Filament	Makeshaper	727559001578	https://goo.gl/xNhi7T	N/A	\$ 105.00	1	\$ 105.00
2	5	Flotation	ABS Plastic Filament	ORANGE 2.5KG 2.85 mm ABS Filament	Makeshaper	727559000342	https://goo.gl/9M1Qjd	N/A	\$ 47.25	1	\$ 47.25
2	6	Flotation	ABS Plastic Filament	GRAY 2.5KG 2.85 mm ABS Filament	Makeshaper	727559000304	https://goo.gl/mZihF8	N/A	\$ 47.25	1	\$ 47.25
2	7	Framing	Aluminum	12" x 12" Easy-to-Weld 5052 Aluminum Shee, 1/8" Thick	McMaster-Carr	88895K106	https://goo.gl/Svky7w	N/A	\$ 16.55	1	\$ 16.55
2	8	Framing	Aluminum	24" x 24" Easy-to-Weld 5052 Aluminum Sheet, 1/8" Thick	McMaster-Carr	88895K106	https://goo.gl/5xcdLH	N/A	\$ 49.65	1	\$ 49.65
1	15	Wiring	Jumper Wires	120pcs Multicolored Dupont Wire Breadboard Jumper Wires Ribbon Cables Kit for arduino	Elegoo via Amazon	N/A	N/A	https://goo.gl/uDJwBK	\$ 7.21	1	\$ 7.21
1	16	Electronics	Voltage Regulator	5-32V to 0-30.0V adjustable buck CC CV converter with volt amp display.	DROK via Amazon	N/A	N/A	https://goo.gl/NBj1Mx	\$ 10.47	1	\$ 10.47
1	17	Wiring	Arduino Power Connection	9V battery holder with switch & 5.5mm/2.1mm plug	Adafruit	67	https://goo.gl/4TPAvA	https://goo.gl/nyCqx7	\$ 3.95	2	\$ 7.90
1	18	Wiring	Pi-Arduino Connection	SB 2.0 High Speed Male A To Male A Cable	Your Cable Store, Amazon	N/A	N/A	https://goo.gl/xqhrS2	\$ 8.29	1	\$ 8.29
2	19	Wiring	Network Connection	Stranded Direct Burial Ethernet Cable							\$ -
1	20	Wiring	Common ROV Wiring	20 AWG Silicone Wire Spool 50 feet ultra flexible, high temp	BNTECHGO via Amazon	N/A	N/A	https://goo.gl/AK1Txn	\$ 14.98	1	\$ 14.98
2	21	Vision	Camera 1	Raspberry Pi Camera Module V2-8 Megapixel,1080p	Raspberry Pi via Amazon	N/A	N/A	https://goo.gl/9bxuu5	\$ 25.77	1	\$ 25.77
1	22	Wiring	Crimps	100 Wire Butt Connector Crimp Terminal 16-22 AWG Assorted Insulated Straight	MUYI via Amazon	N/A	N/A	https://goo.gl/xTwVq8	\$ 7.99	1	\$ 7.99
2	23	Flotation	Alumilite Microballoons	5 lbs of microballoons to be mixed with epoxy	Best Value Vacs	AMCB	https://goo.gl/eQG85u	N/A	\$ 22.50	1	\$ 22.50
2	24	Flotation	Casting epoxy	Environmental Technology 128-Ounce Kit Casting' Craft Casting Epoxy, Clear	Enviro. Tech. via Amazon	N/A	N/A	https://goo.gl/jAPkWb	\$ 81.10	1	\$ 81.10
	25										\$ -
	26										\$ -