

Category	Description	Total Cost
Batteries and Electrical	Batteries, Chargers, Fusing, Relays	\$1,345
Materials and Fasteners	6061 Aluminum, Rivets, Bolts, Polycarbonate	\$1,021
Wheels, Tires, Tubes and Brakes	Maxxis Tires, Odyssey Wheels	\$1,260
Driver Equipment	Helmets, Seatbelts, Gloves	\$445
Computer Controlled Propulsion System	Digital Controller, Wheel Motor, Throttles	\$950

**Total Electrathon
Estimate**

\$5,021

Batteries and Electrical Accessories

Item No.	Description	Specifications	Unit Cost	Quantity	Total Cost
1	Batteries	PowerSonic PSH12180 21AH AGM 13.3 pounds high impact ABS plastic case Advanced Glass Mat Nut & Bolt Terminal - 5 mm hole opening	\$50	10	\$500
2	Fuse Holders	Inline fuse holder for ATC fuses #12AWG Leads	\$4	5	\$20
3	Fuses	40Amp ATC	\$2	10	\$20
4	Battery charger	Battery Charger, Shutoff Charger, UL Rated Amps 12V/10A, UL Rated Amps 24V/5A, Manual 12/24V	\$100	2	\$200
5	Insulated Battery Box	40 Quart Igloo or Coleman Wheeled Marine Cooler	\$150	1	\$150
	Wire	Hook Up Wire 12AWG 65 Strand 600V (25'ea Red, Black, Blue and White)	\$1	100	\$100
6	Wire Ties	Assorted 7" and 12" UV Rated	\$10	1	\$10
7	DPDT Power Relay	24VDC 30Amp Inductive, 24VDC Coil	\$30	2	\$60
8	Switch	SPST	\$5	2	\$10
9	PolyCarbonate Enclosure	3"x4"x6"	\$15	2	\$30
10	Insulated Spade Connectors	12AWG M/F/Ring Tongue	\$15	3	\$45

11	Inline 2' GFCI Cord	GFCI, Current Rating 15 Amps, Voltage Rating 120 Volts, Reset Type Manual, NEMA Plug Configuration 5-15P, NEMA Receptacle Configuration 5-15R	\$60	1	\$60
12	100' Extension Cord	Extension Cord, Tri-Source, Indoor/Outdoor, Cord Length 100 Ft, Gauge/Conductor 12/3, Max Amps 15, Voltage Rating 125, Watts 1875, Jacket Type PVC	\$125	1	\$125
13	Current Shunt	30Amp 75Mv	\$15	1	\$15
Batteries and Electrical Accessories Subsection Total					\$1,345

Materials and Fasteners					
Item No.	Item	Specifications	Unit Cost	Quantity	Total Cost
14	6061 Aluminum Square Tubing	1.5"x1.5"x1/8"x8'	\$32	12	\$384
15	6061 Aluminum Sheet	4'x8' x 1/16" thick sheet	\$192	1	\$192
16	6061 Aluminum angle	2"x2"x1/8"x8' stick	\$24	1	\$24
17	6061 Aluminum plate	4"x1/8"x8' stick	\$24	1	\$24
18	Aluminum Rivets box	1/8" to 1/4" grip range AB6-4A	\$30	1	\$30
19	Polycarbonate Sheet	4'x8' x 1/16" thick sheet	\$50	2	\$100
20	Grade 8 Hex Bolts 5/16"x18TPIx 2.5"	box 50ea	\$15	2	\$30
21	Grade 8 Hex Bolts 5/16"x18TPIx 3.5"	box 25ea	\$11	4	\$44
22	Grade 8 Hex Bolts 5/16"x18TPIx 4"	box 25ea	\$15	2	\$30
23	Grade 8 Flat Washers USS	box 50ea	\$7	4	\$28
24	Grade 8 Flat Washers SAE	box 50ea	\$5	4	\$20

25	Grade 8 Hex Nuts nylon insert 5/16"x18TPI	box 50ea	\$18	4	\$72
26	Aluminum 6063 Square Tubing	1'x1'x1/16"x8'	\$12	2	\$24
27	1/2" Aluminum Conduit	10' stick	\$19	1	\$19
Subtotal Materials and Fasteners					\$1,021

Wheels, Tires, Tubes and Brakes					
Item No.	Item	Specifications	Unit Cost	Quantity	Total Cost
28	Tires	Maxxis Hookworm 20"x1.95" 115PSI	\$18	5	\$90
29	Tubes	Maxxis Extra Heavy Duty	\$18	5	\$90
30	Wheels	Odyssey Hazard Lite 48H BMX 20" Front Wheel	\$200	3	\$600
31	BMX Brake Assembly	Left/Right	\$40	3	\$120
32	20"Fork	chromoly	\$120	3	\$360
Subtotal Wheels, Tires, Tubes and Brakes					\$1,260

Driver Equipment					
33	Full Face Helmet	DoT/Snell Standard	\$150	2	\$300
34	5 Point Harness	SFI 16.1 Certification w/ Cam release	\$145	1	\$145
Subtotal Driver Equipment					\$445

Computer Controlled Propulsion System					
35	Wheel Motor	48Volt, 40Amp Brushless	\$440	1	\$440
36	Digital Controller	36-72Volt	\$300	1	\$300
37	Thumb Throttle	Hall Effect 0-5volt	\$50	1	\$50
38	Digital Power Meter	DOC Wattson model R102 digital panel meter	\$80	2	\$160

Computer Controlled Propulsion System Subtotal	\$950
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Total Electrathon Cost	\$5,021
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