

PART	LINKS	QUANTITY	PRICE
Deck (material + molds)	How to make your own skateboard - YouTube <a href="#">how to make a skateboard deck</a>		
Veneer	<a href="#">Standard 9.5"x35" Skateboard Veneer Packs - Great Lakes Maple</a>	1 board (7 veneers per board)	\$33.00
Epoxy	<a href="#">Street Deck Maple 7 Layer Sets - Roarocket</a>	AA	\$60.90
Molds	Custom: Electrum Kit:		
Hanger + Baseplate			
Metal (use ems link for our university's pricing on metal)	<a href="https://ems-stores.uwaterloo.ca/ems-site/">https://ems-stores.uwaterloo.ca/ems-site/</a>		
Bushings			
Washers			
Nuts			
Microcontroller System (remote)			
Wheels, Bearings			
BMS System			
100A BMS	<a href="#">link</a>	1 BMS	\$60.99
Motor			
SUNNY SKY 195KV 5400W (WIDTH: 70mm, SHAFT DIAMETER: 10mm)	<a href="https://www.greathobbies.com/productinfo/?prod_id=SSMV3X7020195">https://www.greathobbies.com/productinfo/?prod_id=SSMV3X7020195</a>	1 motor	\$329.99 (expected price \$240 after discounts)
EFLITE 260KV 2500W (WIDTH: 63mm, SHAFT DIAMETER: 8mm)	<a href="https://www.greathobbies.com/productinfo/?prod_id=EFLM4160A">https://www.greathobbies.com/productinfo/?prod_id=EFLM4160A</a>	1 motor	\$239.99 (expected price \$190 after discounts)
ESC			
Spektrum 120A HV ESC	<a href="https://www.greathobbies.com/productinfo/?prod_id=SPMXAE1120HV">https://www.greathobbies.com/productinfo/?prod_id=SPMXAE1120HV</a>	1 ESC	\$309.99 (expected price \$240 after discounts)
CATTLE 120A HV ESC	<a href="https://www.greathobbies.com/productinfo/?prod_id=CCR010013100">https://www.greathobbies.com/productinfo/?prod_id=CCR010013100</a>	1 ESC	\$269.99 (expected price \$220 after discounts)
Pulley			
3:1 gear ratio belt and pulley system	<a href="#">amazon link</a>	1 Kit	\$29.93

Note: I need to do more digging to find one that is cheaper but this one should work

Technical details: (this is what I would estimate as the worst-case scenario)

Est. speed per amp of current draw: 0.79 km/h/A	Est. speed for 30min runtime: 20.2km/h	Note: limit max power to ~80% for battery safety (approx. 100A)	Max expected speed at 100A: 80km/h	Alternative (not in stock but a better option if in stock, \$210) <a href="https://www.greathobbies.com/productinfo/?prod_id=SSMV3X7015200">https://www.greathobbies.com/productinfo/?prod_id=SSMV3X7015200</a>
Est speed per amp of current draw: 1 km/h/A	Est. speed for 30min runtime: 25.6 km/h	No battery power limit needed (max motor current is 75A, measure power draw to ensure the motor doesn't overheat)	Max expected speed at 75A: 75km/h	

Note: has a fan accessory to provide cooling

[https://www.greathobbies.com/productinfo/?prod\\_id=CCR011010000&ref=soldwithprod](https://www.greathobbies.com/productinfo/?prod_id=CCR011010000&ref=soldwithprod)