Part	Quantit	Cost	Vendor/Link	Notes
	y	Per Unit		
Redcat Racing Blackout SC 1/10 Scale Electric Short Course Truck	1	\$155.9 9	https://www.amazon.com/Redcat-Racing-Blackout-Waterproof- Electronics/dp/B00VRNR9KS/	
Servo 2Kg, Metal Arm	1	\$17.99	https://www.amazon.com/gp/product/B01MU7TQV8	
Sensorless Brushless Motor	1	\$24.50	https://www.amazon.com/gp/product/B075Q6FYRN	Sensored BLDC motor also available for \$20 more. Alternatively , can buy chassis with BLDC already installed (Redcat Blacout SC Pro version)
VESC	1	\$83.89	https://www.amazon.com/Turnigy-SK8-ESC-Electric-Skateboard- Conversion/dp/B07CYPWR75/ref=sr_1_1?keywords=Turnigy+SK8- ESC+For+Electric+Skateboard+Conversion&qid=1561481900&s=qateway&s r=8-1	FIO VEISION)
Heat Shrink	1	\$2.66	https://www.digikey.com/product-detail/en/F221B1%2f4+BK100/A014B- 4-ND/281675/?itemSeq=296358571	(Can purchase additional colors if desired)
Solderless Wire Connector	1	\$6.98	https://www.amazon.com/gp/product/B01N7XS4Z7	
3 pin Through Hole Male Header	1	\$0.18	https://www.digikey.com/products/en?keywords=952-2263-nd	
USB Mini Cable 1ft	1	\$6.99	https://www.amazon.com/gp/product/B01N5PHSJE	
Jetson Nano	1	\$99	https://www.amazon.com/NVIDIA-Jetson-Nano-Developer- Kit/dp/B07PZHBDKT/	
Micro SD Card	1	\$12.36	https://www.amazon.com/gp/product/B073JYVKNX	
WiFi Card	1	\$23.90	https://www.amazon.com/gp/product/B01MZA1AB2	

WiFi   Antennae					
Power Barrel   S4.12		1	\$7.99	https://www.amazon.com/gp/product/B01MAV4Z2O	
Barrel   Connector   S.5x2.1   mm			<b>*</b> • • • •	https://www.dimiles.com/engd.ct.datail/au/tauailite.integrational	
Sarret   Connector   S.5x2.1   mm		1	\$4.12		
So. 10	Barrel			CO(p) 10-01700/033-1240-ND/3030230	
Minter   M	Connector				
Pin   Jumper   So.10   https://www.digikey.com/product-detail/en/sullins-connector-solutions/STC025YaN/S9000-ND/76372   https://www.amazon.com/gp/product/B06xRDV49T	5.5x2.1				
Pin   Jumper   So.10   https://www.digikey.com/product-detail/en/sullins-connector-solutions/STC025YaN/S9000-ND/76372   https://www.amazon.com/gp/product/B06xRDV49T	mm				
Solutions/STC025YAN/5900-ND/76372   Buck	Pin	1	\$0.10		
Buck Converter		-	Ψ0110	solutions/STC02SYAN/S9000-ND/76372	
Converter   Battery		1	\$9.99	https://www.amazon.com/gp/product/B06XRDV49T	
Battery   Connector   4mm   5000mAH   1   \$33.49   https://www.amazon.com/go/product/B01E3999FA		1	Ψ		
Connector 4mm		1	\$12.00	https://www.amazon.com/gp/product/B01E3999FA	
4mm         5000mAH         1         \$33.49         https://www.amazon.com/Redcat-Racing-HX-5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI           NiMH battery         Logitech F710         1         \$39.00         https://www.amazon.com/gp/product/B0041RR0TW           Gamepad         2ip Ties         1         \$4.99         https://www.amazon.com/gp/product/B001018DB2E           M3         1         \$3.83 / pack of Screw 40mm         https://www.mcmaster.com/92125a150           M3 Nylon         1         \$3.60 / pack of 100         https://www.mcmaster.com/95610a530           M2.5 Pan         1         \$4.43 / pack of 5crews 100         https://www.mcmaster.com/92005a071           M2.5 Flat         1         \$7.20 / https://www.mcmaster.com/91294a018           Mead         pack of Screws 25         25           10mm         25         https://www.mcmaster.com/91294a018           M2.5 Hex Nut         1         \$2.22 / pack of 5crews 10mm	_	1	φ12.99		
Signature   Sign					
NiMH battery	-	1	<b>#22.40</b>	https://www.amazon.com/Podeat Pacing HV E000MH P Patton, 7 2V	
NiMH		1	\$33.49		
Logitech   F710   S39.00   https://www.amazon.com/gp/product/B0041RR0TW					
Solution   F710   Gamepad   Zip Ties   1   \$4.99   https://www.amazon.com/gp/product/B01018DB2E	battery				
Camepad   St.99   https://www.amazon.com/gp/product/B01018DB2E	Logitech	1	\$39.00	https://www.amazon.com/gp/product/B0041RR0TW	
Zip Ties         1         \$4.99         https://www.amazon.com/gp/product/801018D82E           M3         1         \$3.83 / pack of pack of Screw 40mm         https://www.mcmaster.com/92125a150           M3 Nylon         1         \$3.60 / pack of 100         https://www.mcmaster.com/95610a530           M2.5 Pan         1         \$4.43 / pack of Screws 100         https://www.mcmaster.com/92005a071           M2.5 Flat         1         \$7.20 / https://www.mcmaster.com/91294a018           Head Screws 25 10mm         25         https://www.mcmaster.com/91294a018           M2.5 Hex Nut         1         \$2.22 / pack of pack of pack of pack of Screws 10mm	F710				
M3	Gamepad				
Flathead Screw 25 40mm  M3 Nylon 1 \$3.60 / https://www.mcmaster.com/95610a530  Washers pack of 100  M2.5 Pan 1 \$4.43 / https://www.mcmaster.com/92005a071  Head pack of Screws 100  M2.5 Flat 1 \$7.20 / https://www.mcmaster.com/91294a018  Head pack of Screws 25  10mm  M2.5 Hex 1 \$2.22 / https://www.mcmaster.com/90591a270  Nut pack of	Zip Ties	1	\$4.99		
Screw 40mm         25           M3 Nylon Washers         1 \$3.60 / pack of 100           M2.5 Pan Head Screws 100 Head Screws 10mm         1 \$7.20 / pack of 25           M2.5 Flat Head Screws 10mm         1 \$7.20 / pack of 25           M2.5 Head Pack of Screws 10mm         1 \$7.20 / pack of 25           M2.5 Hex Nut         1 \$2.22 / pack of 32           M2.5 Hex Nut         1 \$2.22 / pack of 32	M3	1	\$3.83 /	https://www.mcmaster.com/92125a150	
Screw 40mm       25         M3 Nylon Washers       1 \$3.60 / pack of 100         M2.5 Pan Head Screws 100 Head Screws 10mm       1 \$7.20 / pack of Screws 25         M2.5 Flat Head Screws 10mm       1 \$7.20 / pack of Screws 10mm         M2.5 Head Pack of Screws 10mm       1 \$7.20 / pack of Screws 10mm	Flathead		pack of		
M3 Nylon         1         \$3.60 / pack of 100         https://www.mcmaster.com/95610a530           M2.5 Pan Head Screws 100mm         1         \$4.43 / pack of 100         https://www.mcmaster.com/92005a071           M2.5 Flat Head Screws 10mm         1         \$7.20 / pack of 100         https://www.mcmaster.com/91294a018           M2.5 Hex Nut         1         \$2.22 / pack of 100         https://www.mcmaster.com/90591a270           M2.5 Hex Nut         1         \$2.22 / pack of 100         https://www.mcmaster.com/90591a270	Screw				
Washers	40mm				
Washers         pack of 100           M2.5 Pan         1         \$4.43 / pack of pack of screws           Screws         100         10mm           M2.5 Flat Head Screws         1         \$7.20 / pack of screws           Head Screws         25         10mm           M2.5 Hex Nut         1         \$2.22 / pack of pack of	M3 Nylon	1	\$3.60 /	https://www.mcmaster.com/95610a530	
M2.5 Pan 1 \$4.43 / https://www.mcmaster.com/92005a071  Head pack of Screws 100  M2.5 Flat 1 \$7.20 / https://www.mcmaster.com/91294a018  Head pack of Screws 25  10mm  M2.5 Hex 1 \$2.22 / pack of  Nut pack of	•		pack of		
M2.5 Pan       1       \$4.43 / pack of pack of Screws       100         10mm       100       100         M2.5 Flat Head Screws       1       \$7.20 / pack of Screws       25         10mm       25       10mm         M2.5 Hex Nut       1       \$2.22 / pack of			-		
Head Screws 100         pack of 100           M2.5 Flat Head Screws 10mm         1 \$7.20 / https://www.mcmaster.com/91294a018           Head Pack of Screws 10mm         25           M2.5 Hex Nut Pack of Nut Pack of         1 \$2.22 / pack of	M2.5 Pan	1		https://www.mcmaster.com/92005a071	
Screws 10mm         100           M2.5 Flat Head Screws 10mm         1 \$7.20 / https://www.mcmaster.com/91294a018           Head Pack of Screws 10mm         25           M2.5 Hex Nut         1 \$2.22 / pack of		•			
10mm         \$7.20 /   https://www.mcmaster.com/91294a018         M2.5 Flat Head Pack of Screws 10mm       25         M2.5 Hex Nut Pack of Pack of Pack of Nut       1 \$2.22 /   https://www.mcmaster.com/90591a270			_		
M2.5 Flat       1       \$7.20 / pack of pack of Screws       https://www.mcmaster.com/91294a018         Screws       25         10mm       25         M2.5 Hex       1       \$2.22 / pack of         Nut       pack of			100		
Head pack of Screws 25 10mm  M2.5 Hex 1 \$2.22 / https://www.mcmaster.com/90591a270 Nut pack of		1	\$7.20 /	https://www.mcmaster.com/91294a018	
Screws         25           10mm         https://www.mcmaster.com/90591a270           M2.5 Hex         1         \$2.22 / pack of		1		regary	
10mm         bttps://www.mcmaster.com/90591a270           M2.5 Hex         1         \$2.22 / pack of           Nut         pack of			_		
M2.5 Hex Nut 1 \$2.22 / https://www.mcmaster.com/90591a270 pack of			25		
Nut pack of		4	ф2 22 <i>′</i>	https://www.mcmactor.com/00501e370	
		1	I .	nttps://www.mcmaster.com/90591a270	
100	Nut		_		
			100		

## **Sensor Options**

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
YDLidar	1	\$99	https://www.robotshop.com/en/ydlidar-x4-360- laser-scanner.html	
USB Micro Splitter 1ft	1	\$7.99	https://www.amazon.com/gp/product/B06XCKX7XC	
Realsense D435i	1	\$199	https://store.intelrealsense.com/buy-intel-realsense- depth-camera-d435i.html	
USB 3.0 1ft	1	\$5.99	https://www.amazon.com/gp/product/B01809N39W	
M3 Pan Head Screw 6mm	1	\$5.06	https://www.mcmaster.com/92095a179	
Realsense T265	1	\$199	https://store.intelrealsense.com/buy-intel-realsense- tracking-camera-t265.html	
M3 Pan Head Screw 6mm	1	\$5.06	https://www.mcmaster.com/92095a179	
Razor IMU	1	\$37.50	https://www.digikey.com/product- detail/en/sparkfun-electronics/SEN-14001/1568- 1460-ND/6569364	
MicroUSB 1 ft	1	\$7.99	https://www.amazon.com/Sabrent-6-Pack-Premium- Cables-CB-UM61/dp/B011KMSNXM	

## Optional Items

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
Redcat Racing Fast Charger	1	\$18.70	https://www.amazon.com/gp/product/B015ZQEID8	
5000mAH NiMH battery	1	\$33.49	https://www.amazon.com/Redcat-Racing-HX- 5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI	Extra Battery
Four Port USB 3.0 Hub	1	\$17.49	https://www.amazon.com/gp/product/B00DQFGH80	Increase USB ports from 4 to 7
Velcro	1	\$5.77	https://www.amazon.com/gp/product/B000WLFRXC	