

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
Redcat Racing Blackout SC 1/10 Scale Electric Short Course Truck	1	\$155.99	<a href="https://www.amazon.com/Redcat-Racing-Blackout-Waterproof-Electronics/dp/B00VRNR9KS/">https://www.amazon.com/Redcat-Racing-Blackout-Waterproof-Electronics/dp/B00VRNR9KS/</a>	
Servo 2Kg, Metal Arm	1	\$17.99	<a href="https://www.amazon.com/gp/product/B01MU7TQV8">https://www.amazon.com/gp/product/B01MU7TQV8</a>	
Sensorless Brushless Motor	1	\$24.50	<a href="https://www.amazon.com/gp/product/B075Q6FYRN">https://www.amazon.com/gp/product/B075Q6FYRN</a>	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	<a href="https://hobbyking.com/en_us/turnigy-sk8-esc-for-electric-skateboard-conversion.html">https://hobbyking.com/en_us/turnigy-sk8-esc-for-electric-skateboard-conversion.html</a>	
Heat Shrink	1	\$2.66	<a href="https://www.digikey.com/product-detail/en/3m/FP-301VW-1-4-BLACK-4-BUL/3M161471-ND/3130855">https://www.digikey.com/product-detail/en/3m/FP-301VW-1-4-BLACK-4-BUL/3M161471-ND/3130855</a>	(Can purchase additional colors if desired)
Solderless Wire Connector	1	\$6.98	<a href="https://www.amazon.com/gp/product/B01N7XS4Z7">https://www.amazon.com/gp/product/B01N7XS4Z7</a>	
3 pin Through Hole Male Header	1	\$0.18	<a href="https://www.digikey.com/products/en?keywords=952-2263-nd">https://www.digikey.com/products/en?keywords=952-2263-nd</a>	
USB Mini Cable 1ft	1	\$6.99	<a href="https://www.amazon.com/gp/product/B01N5PHSJE">https://www.amazon.com/gp/product/B01N5PHSJE</a>	
Jetson Nano	1	\$99	<a href="https://www.nvidia.com/en-us/autonomous-machines/embedded-systems/jetson-nano/">https://www.nvidia.com/en-us/autonomous-machines/embedded-systems/jetson-nano/</a>	
Micro SD Card	1	\$12.36	<a href="https://www.amazon.com/gp/product/B073JYVKNX">https://www.amazon.com/gp/product/B073JYVKNX</a>	
WiFi Card	1	\$23.90	<a href="https://www.amazon.com/gp/product/B01MZA1AB2">https://www.amazon.com/gp/product/B01MZA1AB2</a>	
WiFi Antennae	1	\$7.99	<a href="https://www.amazon.com/gp/product/B01MAV4Z2O">https://www.amazon.com/gp/product/B01MAV4Z2O</a>	
Power Barrel Connector 5.5x2.1 mm	1	\$4.12	<a href="https://www.digikey.com/product-detail/en/tensility-international-corp/10-01780/839-1246-ND/5638256">https://www.digikey.com/product-detail/en/tensility-international-corp/10-01780/839-1246-ND/5638256</a>	
Pin Jumper	1	\$0.10	<a href="https://www.digikey.com/product-detail/en/sullins-connector-solutions/STC02SYAN/S9000-ND/76372">https://www.digikey.com/product-detail/en/sullins-connector-solutions/STC02SYAN/S9000-ND/76372</a>	
Buck Converter	1	\$9.99	<a href="https://www.amazon.com/gp/product/B06XRDV49T">https://www.amazon.com/gp/product/B06XRDV49T</a>	

Battery Connector 4mm	1	\$12.99	<a href="https://www.amazon.com/gp/product/B01E3999FA">https://www.amazon.com/gp/product/B01E3999FA</a>	
5000mAH NiMH battery	1	\$33.49	<a href="https://www.amazon.com/Redcat-Racing-HX-5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI">https://www.amazon.com/Redcat-Racing-HX-5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI</a>	
Logitech F710 Gamepad	1	\$39.00	<a href="https://www.amazon.com/gp/product/B0041RR0TW">https://www.amazon.com/gp/product/B0041RR0TW</a>	
Zip Ties	1	\$4.99	<a href="https://www.amazon.com/gp/product/B01018DB2E">https://www.amazon.com/gp/product/B01018DB2E</a>	
Medium Strength Thread Locker	1	\$3.50	<a href="https://www.amazon.com/Permatex-24200-Medium-Strength-Threadlocker/dp/B0002UEMZ2">https://www.amazon.com/Permatex-24200-Medium-Strength-Threadlocker/dp/B0002UEMZ2</a>	
Super Glue	1	\$3.99	<a href="https://www.amazon.com/Loctite-Ultra-Control-4-Gram-1363589/dp/B003Y49R7G">https://www.amazon.com/Loctite-Ultra-Control-4-Gram-1363589/dp/B003Y49R7G</a>	
Electrical Tape	1	\$2.00	<a href="https://www.amazon.com/Scotch-Electrical-Tape-4-Inch-66-Foot/dp/B001ULCB1O">https://www.amazon.com/Scotch-Electrical-Tape-4-Inch-66-Foot/dp/B001ULCB1O</a>	
M3 Flathead Screw 40mm	1	\$3.83 / pack of 25	<a href="https://www.mcmaster.com/92125a150">https://www.mcmaster.com/92125a150</a>	
M3 Nylon Washers	1	\$3.60 / pack of 100	<a href="https://www.mcmaster.com/95610a530">https://www.mcmaster.com/95610a530</a>	
M2.5 Pan Head Screws 10mm	1	\$4.43 / pack of 100	<a href="https://www.mcmaster.com/92005a071">https://www.mcmaster.com/92005a071</a>	
M2.5 Flat Head Screws 10mm	1	\$7.20 / pack of 25	<a href="https://www.mcmaster.com/91294a018">https://www.mcmaster.com/91294a018</a>	
M2.5 Hex Nut	1	\$2.22 / pack of 100	<a href="https://www.mcmaster.com/90591a270">https://www.mcmaster.com/90591a270</a>	

### Sensor Options

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
YDLidar	1	\$99	<a href="https://www.robotshop.com/en/ydlidar-x4-360-laser-scanner.html">https://www.robotshop.com/en/ydlidar-x4-360-laser-scanner.html</a>	
USB Micro Splitter 1ft	1	\$7.99	<a href="https://www.amazon.com/gp/product/B06XCKX7XC">https://www.amazon.com/gp/product/B06XCKX7XC</a>	
Realsense D435i	1	\$199	<a href="https://store.intelrealsense.com/buy-intel-realsense-depth-camera-d435i.html">https://store.intelrealsense.com/buy-intel-realsense-depth-camera-d435i.html</a>	

USB 3.0 1ft	1	\$5.99	<a href="https://www.amazon.com/gp/product/B01809N39W">https://www.amazon.com/gp/product/B01809N39W</a>	
M3 Pan Head Screw 6mm	1	\$5.06	<a href="https://www.mcmaster.com/92095a179">https://www.mcmaster.com/92095a179</a>	
Realsense T265	1	\$199	<a href="https://store.intelrealsense.com/buy-intel-realsense-tracking-camera-t265.html">https://store.intelrealsense.com/buy-intel-realsense-tracking-camera-t265.html</a>	
M3 Pan Head Screw 6mm	1	\$5.06	<a href="https://www.mcmaster.com/92095a179">https://www.mcmaster.com/92095a179</a>	
Razor IMU	1	\$37.50	<a href="https://www.digikey.com/product-detail/en/sparkfun-electronics/SEN-14001/1568-1460-ND/6569364">https://www.digikey.com/product-detail/en/sparkfun-electronics/SEN-14001/1568-1460-ND/6569364</a>	
MicroUSB 1 ft	1	\$7.99	<a href="https://www.amazon.com/Sabrent-6-Pack-Premium-Cables-CB-UM61/dp/B011KMSNXM">https://www.amazon.com/Sabrent-6-Pack-Premium-Cables-CB-UM61/dp/B011KMSNXM</a>	

#### Optional Items

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
Power Supply (5V 4Amp)	1	\$13.99	<a href="https://www.amazon.com/ALITOVE-Converter-5-5x2-1mm-100V-240V-Security/dp/B078RT3ZPS">https://www.amazon.com/ALITOVE-Converter-5-5x2-1mm-100V-240V-Security/dp/B078RT3ZPS</a>	Power the Jetson Nano without using battery
Redcat Racing Fast Charger	1	\$18.70	<a href="https://www.amazon.com/gp/product/B015ZQEID8">https://www.amazon.com/gp/product/B015ZQEID8</a>	
5000mAH NiMH battery	1	\$33.49	<a href="https://www.amazon.com/Redcat-Racing-HX-5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI">https://www.amazon.com/Redcat-Racing-HX-5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI</a>	Extra Battery
Four Port USB 3.0 Hub	1	\$17.49	<a href="https://www.amazon.com/gp/product/B00DQFGH80">https://www.amazon.com/gp/product/B00DQFGH80</a>	Increase USB ports from 4 to 7
Velcro	1	\$5.77	<a href="https://www.amazon.com/gp/product/B000WLFRCX">https://www.amazon.com/gp/product/B000WLFRCX</a>	
Push Button	1	\$12.99	<a href="https://www.robotshop.com/en/vex-bumper-switch.html">https://www.robotshop.com/en/vex-bumper-switch.html</a>	Detects when the front bumper has made contact with an object
Female to Female Jumper Cable	1	\$1.95 per pack of 20	<a href="https://www.digikey.com/product-detail/en/sparkfun-electronics/PRT-12796/1568-1513-ND/5993861">https://www.digikey.com/product-detail/en/sparkfun-electronics/PRT-12796/1568-1513-ND/5993861</a>	
1K Ohm Resistor	1	\$0.10	<a href="https://www.digikey.com/product-detail/en/stackpole-electronics-inc/CF14JT1K00/CF14JT1K00CT-ND/1830350">https://www.digikey.com/product-detail/en/stackpole-electronics-inc/CF14JT1K00/CF14JT1K00CT-ND/1830350</a>	

1/8" Heat Shrink	1	\$1.41	<a href="https://www.digikey.com/product-detail/en/alpha-wire/F221B1-8-BK100/A018B-4-ND/281671x">https://www.digikey.com/product-detail/en/alpha-wire/F221B1-8-BK100/A018B-4-ND/281671x</a>	
20mm M2.5 Pan Head Screws	1	\$5.92 per pack of 100	<a href="https://www.mcmaster.com/92000a111">https://www.mcmaster.com/92000a111</a>	