

LienCNC V2 Parts List *Note, these are the parts I purchased. There are other items I had that other users might need to buy misc metric hardware, crimp wire ferruls, metric taps, misc interconnection wiring in control panel, etc.

***** Note: There are multiple tabs to this BOM. This page is what I expressly bought when I built it and the prices I paid. The next tab is a solidworks geberated BOM with every part in the assembly called out by assembly QTY.**

Vendor	Qty:	PN / EAN# / ASIN#	Price (Ea)	Price (Total)	Description	Notes	Link
Amazon	1	HGR20-300	\$78.00	\$78.00	Linear Guide Rail 2Pcs HGR20-300mm, Linear Slide Rail with 1Pcs RM1605-300mm Ballscrew with BF12/BK12 Kit Linear Slide Rail Guide Rail Square for DIY CNC Routers Lathes Mills	Note, my rail lengths were slightly over sized and ball screws were slightly off print. So I had to machine relief pockets in my plates for oversided rails and made 3DP spacers at the end of the ball screws to go between 6900-RS bearings and ball screw shoulders.	https://www.amazon.com/gp/product/B083CKZR5K/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1
Amazon	3	HGR20-1000	\$107.99	\$323.97	Linear Guide Rail 2Pcs HGR20-1000mm Linear Slide Rail with 1Pcs RM1605-1000mm Ballscrew with BF12/BK12 Kit Linear Slide Rail Guide Rail Square for DIY CNC Routers Lathes Mills. Note that since the design only uses 1 leanr rail per Y axis, you could just buy a seperate matching ball screw which means you only need 2 of these kits. But I didn't want any mismatch on the components, so now I just have 2 extra rails and 4 extra carriages as future spares.	Note, my rail lengths were slightly over sized and ball screws were slightly off print. So I had to machine relief pockets in my plates for oversided rails and made 3DP spacers at the end of the ball screws to go between 6900-RS bearings and ball screw shoulders.	https://www.amazon.com/gp/product/B083CKZR5K/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1
Amazon	1	MDR-60-24	\$19.99	\$19.99	MEAN WELL MDR-60-24 DIN-Rail Power Supply 24V 2.5 Amp 60W		https://www.amazon.com/gp/product/B005T6OBFU/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1
Amazon	1	MDR-60-5	\$21.47	\$21.47	MEAN WELL MDR-60-5 AC to DC DIN-Rail Power Supply 5V 10 Amp 50W		https://www.amazon.com/gp/product/B005T6SAJI/ref=ppx_yo_dt_b_asin_title_o01_s01?ie=UTF8&psc=1
Amazon	2	BE-032-3-fba	\$12.99	\$25.98	2PCS 10mm to 10mm Aluminium Plum Flexible Shaft Coupling Diameter 20mm Length 25mm Connector Flexible Coupler for 3D Printer CNC Machine and Servo Stepped Motor (10x10mm)		https://www.amazon.com/gp/product/B07TF63R4C/ref=ppx_yo_dt_b_asin_title_o01_s01?ie=UTF8&psc=1
Amazon	1	EAN# 0737123111343	\$35.89	\$35.89	DIN Rail Terminal Block Kit #2 Red/Black Dinkle 20 DK4N 10 AWG Gauge 30A 600V Ground DK4N-PE Jumper DSS4N-10P End Covers End Brackets		https://www.amazon.com/gp/product/B07NVVBY98/ref=ppx_yo_dt_b_asin_title_o09_s08?ie=UTF8&psc=1
Amazon	1	AFB01F2P	\$18.99	\$18.99	Automation Systems Interconnect ASI AFB01F2P DIN Rail Mounted Midget Fuse Holder, 2 Pole, 10 x 38 mm, 13/32" Diameter x 1.5" Length, 18 to 8 AWG, 30 Amp, 600V		https://www.amazon.com/gp/product/B00W4XV1XQ/ref=ppx_yo_dt_b_asin_title_o09_s08?ie=UTF8&psc=1
Amazon	1	GLD11-40 (EAN# 0791294549923)	\$18.99	\$18.99	Electrical Buddy Universal Switch 2 Position 3 Phase Panel Rotary Selector Changeover Switch GLD11 40A AC 690V 40A		https://www.amazon.com/gp/product/B07TJW9V1V/ref=ppx_yo_dt_b_asin_title_o09_s08?ie=UTF8&psc=1
Amazon	1	Batige - USBHDMI	\$10.99	\$10.99	BATIGE USB 3.0 & HDMI to HDMI + USB3.0 AUX Extension Dash Panel Waterproof Car Flush Mount Cable for Car Boat and Motorcycle - 3ft		https://www.amazon.com/gp/product/B073HZ4STM/ref=ppx_yo_dt_b_asin_title_o09_s07?ie=UTF8&psc=1
Amazon	1	ASIN# B07VYWW2HG	\$24.99	\$24.99	CNLINKO LP24 Aviation Connector M24 Male Plug with Female Socket Waterproof Metal Thread Panel Connector 4 Pins for AC DC Signal LED Lighting Equipment		https://www.amazon.com/gp/product/B07VYWW2HG/ref=ppx_yo_dt_b_asin_title_o09_s06?ie=UTF8&psc=1
Amazon	1	ASIN# B07GZBXGR7	\$7.99	\$7.99	5PCS GX16-6, 6Pins, 16mm, Panel Metal Mount Circular Metal Aviation Connector Adapter Male Female Plug Socket (5 Pcs Set)		https://www.amazon.com/gp/product/B07GZBXGR7/ref=ppx_yo_dt_b_asin_title_o09_s05?ie=UTF8&psc=1
Amazon	1	ASIN# B0753FF184	\$22.99	\$22.99	5PCS GX20-4, 4Pins, 20mm, Panel Metal Mount Circular Metal Aviation Connector Adapter Male Female Plug Socket (5 Pcs Set)		https://www.amazon.com/gp/product/B0753FF184/ref=ppx_yo_dt_b_asin_title_o09_s03?ie=UTF8&psc=1
Amazon	1	ASIN# B08H8JM451	\$9.99	\$9.99	RJ45 Shielded Industrial Dual Panel Mount Female to Female Coupler Panel Mount Waterproof Connector Combo with Cap Network Connectors Cat5/5e/6 8P8C Connector Waterproof Cover (2 Pack, Black)		https://www.amazon.com/gp/product/B08H8JM451/ref=ppx_yo_dt_b_asin_title_o09_s03?ie=UTF8&psc=1
Amazon	1	ASIN# B078S17FZ5	\$8.00	\$8.00	10Pcs Black US 3 Pins Power Socket Plug Panel Screw Mount Type Female Connectors Adapter		https://www.amazon.com/gp/product/B078S17FZ5/ref=ppx_yo_dt_b_asin_title_o09_s03?ie=UTF8&psc=1
Amazon	1	ASIN# B088FX3S8J	\$5.81	\$5.81	USB to RS485 Converter Adapter CH340T Chip 64-bit Suitable for Windows 7 8 10 (Pack of 2)		https://www.amazon.com/gp/product/B088FX3S8J/ref=ppx_yo_dt_b_asin_title_o09_s01?ie=UTF8&psc=1
Amazon	1	E5-9JOT-1VXO	\$12.99	\$12.99	TWTADE/Red Mushroom Cap 1NO 1NC DPST Emergency Stop Push Button Switch AC 660V 10A (Quality Assurance for 3 Years) YW1B-V4E11R		https://www.amazon.com/gp/product/B07C2NJN94/ref=ppx_yo_dt_b_asin_title_o09_s01?ie=UTF8&psc=1

Amazon	1	ASIN# B06XRT2YFV	\$15.99	\$15.99	5PCS GX12-3, 3Pins, 12mm, Panel Metal Mount Circular Metal Aviation Connector Adapter Male Female Plug Socket (5 Pcs Set)		https://www.amazon.com/gp/product/B06XRT2YFV/ref=ppx_yo_dt_b_asin_title_o09_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B07TT4HH5L	\$18.99	\$18.99	1238 48V Fan, 120mm x 38mm Dual Ball Bearings DC Brushless Cooling Fan		https://www.amazon.com/gp/product/B07TT4HH5L/ref=ppx_yo_dt_b_asin_title_o08_s01?ie=UTF8&psc=1
Amazon	1	ASIN# B075Q55ZNN	\$9.99	\$9.99	120mm Fan Filter 2 Pack IP40 Dustproof Blower Guard ABS Computer Ventilator Grill 12cm Fan Mesh Cover Tool-Free Fan Strainer Compatible for 120x120 Case Fan USB Cooling Fan		https://www.amazon.com/gp/product/B075Q55ZNN/ref=ppx_yo_dt_b_asin_title_o08_s00?ie=UTF8&psc=1
Amazon	3	ASIN# B07HBT3442	\$16.99	\$50.97	R55 1M Length Plastic Closed can Open Cable Drag Chain Wire Carrier (25x57mm)		https://www.amazon.com/gp/product/B07HBT3442/ref=ppx_yo_dt_b_asin_title_o07_s01?ie=UTF8&psc=1
Amazon	1	ASIN# B077Z1W2HJ	\$36.00	\$36.00	Wokesi 14Pcs,ER20 1mm 2mm 3mm 4mm 5mm 6mm 7mm 8mm 9mm 10mm 11mm 12mm 13mm 1/8 Clamping Diameter, Spring Collet Chuck Set For CNC Lathe Machine Mill Tool(COLLET DIA:1mm-13mm T.I.R:8um,ER20)		https://www.amazon.com/gp/product/B077Z1W2HJ/ref=ppx_yo_dt_b_asin_title_o06_s01?ie=UTF8&psc=1
Amazon	1	EAN# 0753922958088	\$28.49	\$28.49	CNC Spoilboard Surfacing Router Bits, 1/2 inch Shank 2 inch Cutting Diameter, Slab Flattening Router Bit Planing Bit Wood Milling Cutter Planer Woodworking Tool by NITOMAK (Carbide)		https://www.amazon.com/gp/product/B07WQG85HV/ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1
Amazon	2	ASIN# B07V4PR84Y	\$10.99	\$21.98	3Pcs TL-W5MC1 5mm 3 Wire Inductive Proximity Sensor Detection Switch NPN DC 6-36V		https://www.amazon.com/gp/product/B07V4PR84Y/ref=ppx_yo_dt_b_asin_title_o03_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B08514H2BJ	\$27.00	\$27.00	5pcs ER20 Nut for Clamping collets, Balanced to G2.5/25000rpm-NUT-ER20-G25-New		https://www.amazon.com/gp/product/B08514H2BJ/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1
Amazon	1	YC-ENC-FE-S YC-20X16X10-UL-FE	\$196.00	\$196.00	Yuco YC-20X16X10-UL-FE Fully Enclosed (no gland plate) IP66 Enclosure, UL Certified, Nema 4, 16 Gauge, Single Door Hinge Cover, Wall-Mount, Backplate (20 x 16 x 10)		https://www.amazon.com/gp/product/B074XGTHCK/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B07RXK96GV	\$4.99	\$4.99	10 Pcs FC-26P 2x13 Pin 2.54mm Dual Rows Female Header IDC Cable Connector		https://www.amazon.com/gp/product/B07RXK96GV/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B07P9GM8H1	\$9.99	\$9.99	10Ft/3M IDC 26P 1.27mm Rainbow Color Flat Ribbon Wire		https://www.amazon.com/gp/product/B07P9GM8H1/ref=ppx_yo_dt_b_asin_title_o09_s00?ie=UTF8&psc=1
Amazon	1	EAN# 0713072774679	\$10.59	\$10.59	10 Pcs 6000-2RS Double Rubber Seal Bearings 10x26x8mm, Pre-Lubricated and Stable Performance and Cost Effective, Deep Groove Ball Bearings.		https://www.amazon.com/gp/product/B072F6J3GN/ref=ppx_yo_dt_b_asin_title_o08_s00?ie=UTF8&psc=1
Amazon	7	ASIN# B07L11S1Q4	\$9.89	\$69.23	Slide in T-Nut, M5 Threaded for 4040 Series Aluminum Extrusions Profile, Pack of 12		https://www.amazon.com/gp/product/B07L11S1Q4/ref=ppx_yo_dt_b_asin_title_o07_s01?ie=UTF8&psc=1
Amazon	1	ASIN# B01LZA04NX	\$41.49	\$41.49	R55 25mm x 38mm Plastic Cable Wire Carrier Drag Chain 1M Black for CNC		https://www.amazon.com/uxcell-Plastic-Cable-Carrier-Chain/dp/B01LZA04NX/ref=sr_1_2?dchild=1&keywords=R55+25+x+38mm&qid=1616795563&s=industrial&sr=1-2
Amazon	1	EAN# 0737123110988	\$29.99	\$29.99	Dinkle DIN Rail Block Kit #2 DIN Rail Terminal Block Kit Dinkle 20 DK4N 10 AWG Gauge Ground DK4N-PE Jumper DSS4N-10P End Covers End Brackets,30 Amp, 600V		https://www.amazon.com/gp/product/B01IDL6OW0/ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1
Amazon	1	EAN# 0737123111329	\$28.99	\$28.99	Dinkle UL Every Color DIN Rail Terminal Block Kit 20 DK2.5N 12 AWG Gauge 20A 600V Ground DK4N-PE Jumper DSS2.5N-10P End Covers End Brackets		https://www.amazon.com/gp/product/B07NVV28D9/ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1
Amazon	1	43235-27956	\$11.50	\$11.50	2 Ports Dual USB 3.0 Male to USB 3.0 Female AUX Flush Mount Car Mount Extension Cable for Car Truck Boat Motorcycle Dashboard Panel -(3 Feet)		https://www.amazon.com/gp/product/B01MY1WDIU/ref=ppx_yo_dt_b_asin_title_o04_s00?ie=UTF8&psc=1
Amazon	1	2KTK20	\$10.99	\$10.99	KTK-20 Fast Acting Limitron Fuse 600 VAC 20A (2 Pack) QSU		https://www.amazon.com/gp/product/B07VH8RDLV/ref=ppx_yo_dt_b_asin_title_o01_s01?ie=UTF8&psc=1
Amazon	1	EAN# 0712994005847	\$13.99	\$13.99	Rocaris 5 Pcs M3 M4 M5 M6 M8 Titanium Coated HSS Spiral Flute Metric Taps Set		https://www.amazon.com/gp/product/B01JSAFB92/ref=ppx_yo_dt_b_asin_title_o00_s01?ie=UTF8&psc=1
Amazon	1	A03-DDK01-S-KH	\$33.99	\$33.99	Kehuashina CNC Z-Axis Router Mill Touch Plate Mach3 Tool Setting Probe Milling Tools Silver		https://www.amazon.com/gp/product/B07FLQRKPN/ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B08FDGJMVF	\$399.90	\$399.90	Minisforum - UM300 Mini PC AMD Ryzen 3 3300U Windows 10 Pro Mini PC Desktop Computer, Radeon Vega 6 Graphics,8GB DDR4 256GB SSD,HDMI2.0/DP/USB-C Triple 4K@60Hz Output,with1000M LAN Intel WIFI6 AX200 BT5.1		https://www.amazon.com/gp/product/B08FDGJMVF/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B01HOM9IZ4	\$26.99	\$26.99	TEAMGROUP Elite 8GB Single DDR4 2400MHz PC4-19200 CL16 Unbuffered Non-ECC 1.2V SODIMM 260-Pin Laptop Notebook PC Computer Memory Module Ram Upgrade - TED48G2400C16-S01 - (1x 8GB) Single		https://www.amazon.com/gp/product/B01HOM9IZ4/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B07LD1HPYC	\$13.99	\$13.99	Beduan 8mm x 5mm Clear Pneumatic Tubing Pipe PU Polyurethane Air Compressor Tubing Hose Pipe Line Fluid Transfer 39.4ft 12 Meter		https://www.amazon.com/gp/product/B07LD1HPYC/ref=ppx_yo_dt_b_asin_title_o00_s01?ie=UTF8&psc=1
Amazon	1	ASIN# B07D9JKT91	\$14.99	\$14.99	fosa G1/4 Threaded Computer Water Cooling System Flow Meter Indicator Acrylic Replacement for PC Computer ...	Need to wire pump at 12V (100% duty cycle) for this to function	https://www.amazon.com/gp/product/B07D9JKT91/ref=ppx_yo_dt_b_asin_title_o00_s01?ie=UTF8&psc=1
Amazon	1	TBJ4812B60Z	\$16.98	\$16.98	DC Voltage Regulator Buck Converter DC 48V Step Down to 12V 5A 60W Reducer Power Converter Waterproof Module Transformer for Golf Cart Club Car	Mounted in bottom of control cabinet	https://www.amazon.com/gp/product/B07V8J6BJQ/ref=ppx_yo_dt_b_asin_title_o00_s01?ie=UTF8&psc=1
Amazon	1	ASIN# B07QYFKCJB	\$11.79	\$11.79	fosa Pointer Display Thermometer with Waterproof Probe, PC G1/4 Thread Water Cooling System Temperature Meter for Computer Laptop	This can be wired at 12V or 5V	https://www.amazon.com/gp/product/B07QYFKCJB/ref=ppx_yo_dt_b_asin_title_o00_s01?ie=UTF8&psc=1

Amazon	1	ASIN# B07GS3JPW1	\$11.39	\$11.39	Aramox 6 PCS Barb-Fitting, PC Water Cooling Two-Touch Fitting G1/4 Thread Barb Connector for Tube (6mm)		https://www.amazon.com/gp/product/B07GS3JPW1/ref=ppx_od_dt_b_asin_title_s00?ie=UTF8&psc=1
Amazon	1	ASIN# B07TJH7VD	\$71.39	\$71.39	Bewinner 800L/H Mini Water Cooling Pump 0.7A 7V 12cm/ 4.72in, 17cm/ 6.69in / Note I filled my loop with RV Antifreeze (pink stuff). Works well and keeps the loop from freezing in my garage in the winter months.	AKA Freezomod FS6PD-17 Pump and Resevoir combo (https://freezomod.com/product-category/reservoir-pump-kit/)	https://www.amazon.com/gp/product/B07TJH7VD/ref=ppx_od_dt_b_asin_title_s01?ie=UTF8&psc=1
Amazon	2	NF-P12 redux-1700 PWM	\$13.90	\$27.80	Noctua NF-P12 redux-1700 PWM, High Performance Cooling Fan, 4-Pin, 1700 RPM (120mm, Grey)		https://www.amazon.com/gp/product/B07CG2PGY6/ref=ppx_od_dt_b_asin_title_s01?ie=UTF8&psc=1
Amazon	1	ASIN# B07XCNLKGY	\$16.99	\$16.99	SDTC Tech 4-Pack G1/4" Male to Female Extender Connector 90° Rotary Elbow Enhance Multi-Link Adapter Fitting for PC Water Cooling System, Black	Notes: ModMyMods is much cheaper on watercooling parts	https://www.amazon.com/gp/product/B07XCNLKGY/ref=ppx_od_dt_b_asin_title_s01?ie=UTF8&psc=1
Amazon	1	5060175582614	\$65.48	\$65.48	XSPC EX240 Radiator, 120mm x 2, Dual Fan, Multiport, Black	Notes: ModMyMods is much cheaper on watercooling parts	https://www.amazon.com/gp/product/B008BWR17E/ref=ppx_od_dt_b_asin_title_s01?ie=UTF8&psc=1
Amazon	1	ASIN# B08NX29CB3	\$9.99	\$9.99	DGZZI Black G1/4 Inch Rotary Male to Male Extender Fitting	Notes: ModMyMods is much cheaper on watercooling parts	https://www.amazon.com/dp/B08NX29CB3/ref=cm_sw_r_cp_apa_fabc_hG98FbNE7CREV
Amazon	1	ASIN# B07XDLDYR	\$13.99	\$13.99	SDTC Tech 6 Pack G1/4" Plug Fitting with O-Ring for PC Water Cooling Systems, Black	Notes: ModMyMods is much cheaper on watercooling parts	https://www.amazon.com/dp/B07XDLDYR/ref=cm_sw_r_cp_apa_fabc_UA98FbJZPRZC4
Amazon	1	ASIN# B07X7WKGSK	\$16.99	\$16.99	SDTC Tech G1/4" Ball Valve Water Shutoff Valve Fitting for PC Water Cooling Systems	Notes: ModMyMods is much cheaper on watercooling parts	https://www.amazon.com/dp/B07X7WKGSK/ref=cm_sw_r_cp_apa_fabc_2D98Fb21W0TQC
Amazon	1	TX4T-A01	\$15.00	\$15.00	G1/4" 4-Way Ball Fitting, Rotary, Black	Notes: ModMyMods is much cheaper on watercooling parts	https://www.amazon.com/dp/B01M4KGFQH/ref=cm_sw_r_cp_apa_fabc_RP98FbYFMKPMR
Amazon	1	CP621200	\$30.99	\$30.99	Ferrule Crimping Tool Kit, Preciva AWG23-7 Self-adjustable Ratchet Wire Crimping Tool Kit Crimper Plier Set with 1200PCS Wire Terminals Crimping Connectors Wire End Ferrules		https://www.amazon.com/gp/product/B073TZ5BBG/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
StepperOnline	2	CE3-M3-18	\$15.15	\$30.30	2.7m(106") AWG18 Motor and Encoder Extension Cable Kit for Nema 34 Closed Loop Stepper Motors		https://www.omc-stepperonline.com/cable-kit-2-7-m-106-long-motor-extension-cable-and-2-7-m-106-long-encoder-extension-cable-for-nema-34-closed-loop-stepper-motors-just-for-aviation-plug-model-motor.html?search=%09CE3-M3-18
StepperOnline	2	CE5-M5-18	\$22.89	\$45.78	4.7m(185") AWG18 Motor and Encoder Extension Cable Kit for Nema 34 Closed Loop Stepper Motors		https://www.omc-stepperonline.com/cable-kit-4-7-m-185-long-motor-extension-cable-and-4-7-m-185-long-encoder-extension-cable-for-nema-34-closed-loop-stepper-motors-just-for-aviation-plug-model-motor.html?search=%09CE5-M5-18
StepperOnline	4	1-CL57Y-24HE34	\$91.15	\$364.60	YE Series 1 Axis Closed Loop Stepper CNC Kit 3.0 Nm(424.92oz.in) Nema 24 Motor & Driver		https://www.omc-stepperonline.com/ye-series-1-axis-closed-loop-stepper-cnc-kit-3-0-nm-424-92oz-in-nema-24-motor-and-driver.html?search=1-CL57Y-24HE34
CNC4PC	1	AXBB_B-AXBB-UCCNC_B	\$253.00	\$253.00	AXBB-E Ethernet Motion Controller and Breakout Board Combined Motion Controller Unit (QTY:1 AXBB-E ethernet motion controller and breakout board combined controller / QTY:1 UCCNC License File Bundle)		https://www.cnc4pc.com/axbb-e-ethernet-motion-controller-and-breakout-board-combined-controller-b.html
CNC4PC	1	UCSB	\$64.00	\$64.00	UCSB single port breakout board		https://www.cnc4pc.com/ucsb-single-port-breakout-board.html
CNC4PC	1	S-1000-48	\$119.00	\$119.00	48V/20A Switching CNC Power supply		https://www.cnc4pc.com/48v-20a-switching-cnc-power-supply.html
AliExpress	1	HY02D223B	\$217.00	\$217.00	HUANYANG high quality 4 bearings 2.2KW 220V water cooled spindle motor for engraving machine CNC router ER20 24000rpm		https://www.aliexpress.com/item/32801003817.html?spm=a2q0s.9042311.0.0.14544c4dWvmmZd
AliExpress	1	GT-2R2G-2	\$135.00	\$135.00	2.2KW 220V AC drive vector control inverter frequency inverter VFD HUANYANG (HYRIA) variable		https://www.aliexpress.com/item/32754134517.html?spm=a2q0s.9042311.0.0.14544c4dWvmmZd
AliExpress	2	YY-M-15 80mm	\$10.14	\$20.28	Aluminum Router/Spindle Mount Diameter 80mm		https://www.aliexpress.com/item/32816643732.html?spm=a2q0s.9042311.0.0.14544c4dWvmmZd

Automation Direct	25	SEOOW-16-4BK-1	\$0.59	\$14.75	Southwire flexible portable cord, Type SEOOW, 600V, 4 conductors (includes ground), 16 AWG, TPE conductor insulation material, black, white, red and green, TPE jacket, black, cut to length.		https://www.automationdirect.com/adc/shopping/catalog/cables/bulk_multi-conductor_cable/flexible_portable_cord_(sjoow,soow,sjeow,seoow,type_w)/insulation_type_-_seoow/seoow-16-4bk-1
Automation Direct	25	SEOOW-10-4BK-1	\$1.67	\$41.75	Southwire flexible portable cord, Type SEOOW, 600V, 4 conductors (includes ground), 10 AWG, TPE conductor insulation material, black, white, red and green, TPE jacket, black, cut to length.		https://www.automationdirect.com/adc/shopping/catalog/cables/bulk_multi-conductor_cable/flexible_portable_cord_(sjoow,soow,sjeow,seoow,type_w)/insulation_type_-_seoow/seoow-10-4bk-1
Automation Direct	1	AD-SSR210-22-DCZ	\$42.50	\$42.50	Solid state relay, 35mm DIN rail mount, finger-safe, 4-32 VDC input voltage, SPST, N.O. SCR, 10A contact rating, 24-280 VAC load voltage, zero cross, screw terminal(s), LED indicator(s).		https://www.automationdirect.com/adc/shopping/catalog/relays_-_z-timers/solid_state_relays/din_mount_relays_(ad-ssr8_-_z-ad-ssr2_-_z-ad-ssr6_-_z-ad-hssr8_series)/general_purpose_10a_-_65a,(ad-ssr8_-_z-ad-ssr2_-_z-ad-ssr6_series)/ad-ssr210-22-dcz
Automation Direct	1	AD-SSR630-22-DCZ	\$58.00	\$58.00	Solid state relay, 35mm DIN rail mount, finger-safe, 4-32 VDC input voltage, SPST, N.O. SCR, 30A contact rating, 48-660 VAC load voltage, zero cross, screw terminal(s), LED indicator(s).		https://www.automationdirect.com/adc/shopping/catalog/relays_-_z-timers/solid_state_relays/din_mount_relays_(ad-ssr8_-_z-ad-ssr2_-_z-ad-ssr6_-_z-ad-hssr8_series)/general_purpose_10a_-_65a,(ad-ssr8_-_z-ad-ssr2_-_z-ad-ssr6_series)/ad-ssr630-22-dcz
MISC	1	Misc. Stranded Wire	\$100.00	\$100.00	Misc Stranded Wire for Inside Control Cabinet (I got mine from Menards Plus Leftovers from other projects). I have also found a good source is local surplus dealers, Axeman Surplus near me has plenty of random wire for these sorts of projects.		
Misc	1	Lumber	\$200.00	\$200.00	Misc 2x4 lumber, 3/4" MDF Sheets, Screws, Etc.		
Midwest Steel and Aluminum	2	1/2" Thick ATP-5 Aluminum	\$121.46	\$242.92	25" x 25" x 1/2" ATP-5 Aluminum for fabricating most major brackets	More than what is needed (i.e. some room for screwups)	https://www.midweststeelsupply.com/store/castaluminumplateatp5
Midwest Steel and Aluminum	1	1/4" Thick ATP-5 Aluminum	\$31.22	\$31.22	12" x 12" x 1/4" ATP-5 Aluminum for fabricating Y axis Ballscrew Connection Plates (could also mill down from 1/2" plate, but I had 1/4" around)	More than what is needed (i.e. some room for screwups)	https://www.midweststeelsupply.com/store/castaluminumplateatp5
Midwest Steel and Aluminum	1	1/8" Thick 6061 Aluminum	\$16.13	\$16.13	12" x 12" x 1/8" 6061 Aluminum Sheet for control panel gland plate (you could just drill holes in control panel wall directly... but this makes soldering easier since it is removable)	More than what is needed (i.e. some room for screwups)	https://www.midweststeelsupply.com/store/6061aluminumsheet
8020	4	40-2849	\$3.15	\$12.60	8020 - Rubber Foot		https://8020.net/40-2849.html
8020	4	40-4080 (860mm)	\$38.68	\$154.72	8020 - 40mm x 80mm Extrusion 860mm long		https://8020.net/40-4080.html
8020	2	40-4012 (1000mm)	\$63.57	\$127.14	8020 - 40mm x 120mm Extrusion 1000mm long		https://8020.net/40-4012.html
8020	1	40-8016 (1000mm)	\$139.51	\$139.51	8020 - 80mm x 160mm Extrusion 1000mm long		https://8020.net/40-8016.html
8020	1	14130	\$0.32	\$0.32	Economy M6 Tnut for 40 Series Extrusion		https://8020.net/14130.html
8020	50	13116	\$0.74	\$37.00	Drop In M5 Tnut for 40 Series Extrusion		https://8020.net/13116.html
8020	8	40-1984	\$0.91	\$7.28	Drop In M8 Tnut for 40 Series Extrusion		https://8020.net/40-1984.html
McMaster	1	98689A114	\$3.14	\$3.14	M5 DIN 433 SST Washer (100pk)	For Hardware I recommend Trimcraft AviationRC for smaller quantities. Gino there is awesome, and you can request hardware on his site which is not listed. https://www.trimcraftaviationrc.com/index.php?route=product/category&path=24_18_37	https://www.mcmaster.com/98689A114/
McMaster	2	98689A115	\$4.29	\$8.58	M6 DIN 433 SST Washer (100pk)		https://www.mcmaster.com/98689A115/
McMaster	1	98689A116	\$7.14	\$7.14	M8 DIN 433 SST Washer (100pk)		https://www.mcmaster.com/98689A116/
McMaster	2	91292A129	\$7.74	\$15.48	M5-0.80x25 MM,(FT) SOCKET HEAD CAP SCREWS STAINLESS A2 (18-8) (50pk)		https://www.mcmaster.com/91292A129/
McMaster	1	91292A125	\$10.46	\$10.46	M5-0.80x12 MM,(FT) SOCKET HEAD CAP SCREWS STAINLESS A2 (18-8) (100pk)		https://www.mcmaster.com/91292A125/
McMaster	1	91292A126	\$11.29	\$11.29	M5-0.80x16 MM,(FT) SOCKET HEAD CAP SCREWS STAINLESS A2 (18-8) (100pk)		https://www.mcmaster.com/91292A126/
McMaster	4	91292A137	\$4.87	\$19.48	M6-1.00x20 MM,(FT) SOCKET HEAD CAP SCREWS STAINLESS A2 (18-8) (25pk)		https://www.mcmaster.com/91292A137/
McMaster	2	91292A148	\$9.54	\$19.08	M8-1.25x25 MM,(FT) SOCKET HEAD CAP SCREWS STAINLESS A2 (18-8) (25pk)		https://www.mcmaster.com/91292A148/
McMaster	2	92196A418	\$6.37	\$12.74	5/16" x 1-1/2", (FT) SOCKET HEAD CAP SCREWS STAINLESS A2 (18-8) (10pk)		https://www.mcmaster.com/92196A418/

TOTAL = \$4,665.02