

Expected Print Range		
x Direction (mm)		300
y Direction (mm)		200
z Direction (mm)		280

IMPORTANT
1. To customize the size of the hot bed, please fill in the expected printing range.
2. The main board only supports 180W hot bed (Include MOS tube if exceed range).
3. Considering the physical characteristics of thread rod, print range should not exceed 300*300.

Assembly BOM

ASSEMBLY NAME	ITEM NAME	Dimension	Unit	Material	QUANTITY	Weight	Total weight	Phase
x axis Assembly	Linear Motion Rod Shaft (x axis)	408	mm	Aluminum	2			
	X Axis Housing (left)			PLA (40% filling)	1	48.20	48.20	
	X Axis Housing (right)			PLA (40% filling)	1	48.20	48.20	
	Button Head Socket Cap Screw	M5 X 45			2			
	Button Head Socket Cap Screw	M5 x 25			2			
	Idler Pulley	Teeth: 20 Bore: 5 Width: 6			2			
	Idler Pulley	Teethless Bore: 5 Width: 6			2			
	Long Type Linear Bearings	8 x 15 x 45	mm		2			LM8LUU
y axis Assembly	T Slot 2020 Extrusion (x axis)	460	mm	Aluminum	4			European Standard
	T Slot 2020 Extrusion (y axis)	340	mm	Aluminum	4			European Standard
	T Slot 2020 Extrusion (z axis)	390	mm	Aluminum	4			European Standard
	Linear Motion Rod Shaft (y axis)	334	mm	Aluminum	2			European Standard
	Rod Housing Left 01			PLA (40% filling)	1	19.67	19.67	
	Rod Housing Left 02			PLA (40% filling)	1	10.95	10.95	
	Rod Housing Right 01			PLA (40% filling)	1	20.22	20.22	
	Rod Housing Right 02			PLA (40% filling)	1	10.95	10.95	
	Filament Holder			PLA (40% filling)	1			
	Button Head Socket Cap Screw	M4 X 8			10			
	Button Head Socket Cap Screw	M4 X 22			4			
	Button Head Socket Cap Screw	M5 X 25			2			
	L Shape Flat Bracket	80 X 80 X 1	mm		12			
	Button Head Socket Cap Screw	M6 X 10			8			
	Button Head Socket Cap Screw	M4 X 6			48			
	Round Rubber Feet Bumpers	20 X 20 X 22	mm		4			
	Button Head Socket Cap Screw	M4 X 16			4			
	2020 Series Corner Bracket			Aluminum	20			
	Button Head Socket Cap Screw	M5 X 10			40			
	Stepper Motor				2			Nema 17
	42 Stepper Motor Mounting Plate	42 X 42	mm	Reliability Aluminum	2			
	Limit Micro Switch	1A 125V			1			SPDT
	Phillips Cross Head Screw	M3 X 8			8			
	GT2 Pulley	Teeth: 20 Bore: 5 Width: 6	mm		2			
	Idler Pulley	Teeth: 20 Bore: 5 Width: 6	mm		4			
	GT2 Timing Pulley Belt	Pitch: 2; Width: 6	mm		2			
	T-slot Nuts	M5			42			
	T-slot Nuts	M4			66			
z axis Assembly	z axis support 02			Acrylic Sheet	2			
	z axis support 03			Acrylic Sheet	2			
	z axis support 04			PLA (40% filling)	2	3.96	7.92	
	z axis support 05			Acrylic Sheet	8			
	Linear Motion Rod Shaft (z axis)	390	mm		4			
	T8 Thread rod	350			2			
	Flexible Couplings	5 to 8	mm		2			
	Phillips Cross Head Screw	M2 X 13			4			
	Limit Micro Switch	1A 125V			2			SPDT

	Stepper Motor				2			Nema 17
	Round Flange Linear Ball Bearings	8 x 15 x 45	mm		4			LM8UU
	Phillips Cross Head Screw	M3 x 8			8			
	Button Head Socket Cap Screw	M4 x 12			16			
Heater bed Assembly	z axis support 01			Acrylic Sheet	2			
	1020 T-Track	477	mm	Aluminum	2			
	Heater Bed	300 x 200 x 3	mm		1			Ender 3 V2
	Glass Bed Upgraded Build Surface Plate	300 x 200 x 4	mm		1			Ender 3 V2
	Heated Bed Cover	300 x 200	mm		1			Ender 3 V2
	Flat Bracket	40	mm	Stainless Steel	4			
	Compression Spring	0.5 x 5 x 40	mm		2			
	Compression Mould Die Springs	OD: 8 ; Length: 25			4			
	Knurled Thumb Nuts	M3			6			
	Phillips Cross Head Screw	M3 x 40			5			
	Button Head Socket Cap Screw	M5 x 10			4			
	Button Head Socket Cap Screw	M5 x 12			8			
	Round Flange Linear Ball Bearings	8 x 15 x 45	mm		4			LM8UU
	Anti-backlash Spring Loaded Nut	Pitch: 2 ; Lead: 8	mm		2			
	Phillips Cross Head Screw	M3 x 13			24			
	Square Nut	M3		304 Stainless	24			
Hot end Assembly	Hot End Full Kit				1			
	Hot End Axis Holder			PLA (40% filling)	1	32.28	32.28	
	Hot End Holder 01			PLA (40% filling)	1	10.29	10.29	
	Hot End Holder 02			PLA (40% filling)	1	8.63	8.63	
	Cooling Fan Holder			PLA (40% filling)	2	2.17	4.34	Can be Print or Pruchase
	Series 3010 Cooling Fan	30 x 30 x 10	mm		1			12V
	Series 4010 Cooling Fan	40 x 40 x 10	mm		2			12V
	Long Type Linear Bearings	8 x 15 x 45	mm		2			LM8LUU
	Limit Micro Switch	1A 125V			1			
	Square Nut	M3		304 Stainless	6			
	Phillips Cross Head Screw	M2.5 X 8			8			
	Phillips Cross Head Screw	M3 X 40			2			
	Phillips Cross Head Screw	M3 x 10			4			
	Phillips Cross Head Screw	M2 X 13			2			
	Extruder Feeder				1			Ender 3 V2
	Stepper Motor				1			Nema 17
	42 Stepper Motor Mounting Plate	42 x 42	mm	Reliability Aluminum	1			
	Phillips Cross Head Screw	M3 x 8			4			
Control board Assembly	Control board 01			PLA (40% filling)	1	88.95	88.95	
	Control board 02			PLA (40% filling)	1	24.30	24.3	
	SD Card	2G			1			
	LCD Display Touch Panel	240X320 with PCB 5V/3.3V			1			
	3D Printer Control Board	Gen L V2.1			1			
	Power Supply	460W 12V38A			1			
	Stepper Motor Driver	TMC2208			5			
	Spiral Cable Wrap	6	mm	PE	1			
	Phillips Cross Head Screw	M3 x 8			4			
	Button Head Socket Cap Screw	M4 X 8			16			
	T-slot Nuts	M4			16			
						Total weight	334.90	

Purchase BOM

ASSEMBLY NAME	ITEM NAME	Dimension	Unit	Material	QUANTITY	Cost/Unit	Estimate Cost	Phase
Customize Part	Linear Motion Rod Shaft	408	mm	Aluminum	2	14.99	29.98	x axis
		334	mm	Aluminum	2	13.29	26.58	y axis
		390	mm	Aluminum	4	14.99	59.96	z axis
	T Slot 2020 Extrusion	460	mm	Aluminum	4	7.75	31	x axis
		340	mm	Aluminum	4	4.75	19	y axis
		390	mm	Aluminum	4	4.75	19	z axis
	1020 T-Track	477	mm	Aluminum	2	14.43	28.86	
	3D Printing Part		g	PLA (40% filling)	334.9	0.08	26.792	
	T8 Thread rod	350			2	12	24	
	Acrylic Sheet	297 x 420	mm	Acrylic	1	22.79	22.79	
	Heater Bed	300 x 200 x 3	mm		1	28	28	Ender 3 V2
	Glass Bed Upgraded Build Surface Plate	300 x 200 x 4	mm		1	11.59	11.59	Ender 3 V2
	Heated Bed Cover	300 x 200	mm		1	17.99	17.99	
Hardware	Long Type Linear Bearings	8 x 15 x 45			4	3.75	15	LM8LUU
	Round Flange Linear Ball Bearings	8 x 15 x 45			4	6	24	LM8UU
	2020 Series Corner Bracket			Aluminum	20	0.575	11.5	
	L Shape Flat Bracket	80 x 80 x 1	mm		12	0.6	7.2	
	Flat Bracet	40	mm	Stainless Steel	4	0.59	2.37	
	42 Stepper Motor Mounting Plate	42 x 42	mm	Reliability Aluminum	3	2.518	7.554	
	Anti-backlash Spring Loaded Nut	Pitch: 2 ; Lead: 8	mm		2	2.5	5	
	Compression Spring	0.5 x 5 x 40	mm		1	0.9	0.9	
	Compression Mould Die Springs	OD: 8 ; Length: 25	mm		4	0.8	3.2	
	T-slot Nuts	M5			42	0.16	6.72	
	T-slot Nuts	M4			82	0.1	8.2	
	Knurled Thumb Nuts	M3			6	0.7	4.2	
	Square Nut	M3		304 Stainless	30	0.089	2.67	
	Flexible Couplings	5 to 8	mm		2	5	10	
	GT2 Pulley	Teeth: 20 Bore: 5 Width: 6	mm		2	1.596	3.192	
	Idler Pulley	Teeth: 20 Bore: 5 Width: 6	mm		6	1.8	10.8	
	Idler Pulley	Teethless Bore: 5 Width: 6	mm		2	1.8	3.6	
	GT2 Timing Pulley Belt	Pitch: 2; Width: 6	mm		2	3	6	
	Round Rubber Feet Bumpers	20 X 20 X 22	mm		4	1.75	7	
	Button Head Socket Cap Screw	M4 X 6		304 Stainless	48	0.13	6.33	
		M4 X 8		304 Stainless	26	0.13	3.43	
		M4 x 12		304 Stainless	16	0.14	2.23	
		M4 X 16		304 Stainless	4	0.18	0.73	
		M4 X 20		304 Stainless	4	0.22	0.88	
		M5 X 10		304 Stainless	44	0.09	3.91	
		M5 x 12		304 Stainless	8	0.09	0.71	
		M5 X 25		304 Stainless	4	0.42	1.69	
		M5 X 45		304 Stainless	2	0.63	1.25	
		M6 X 10		304 Stainless	8	0.26	2.08	
		M2 X 12		304 Stainless	6	0.13	0.76	
		M2.5 X 8		304 Stainless	8	0.09	0.73	
		M3 X 8		304 Stainless	24	0.14	3.36	

	Phillips Cross Head Screw	M3 x 10		304 Stainless	4	0.14	0.56	
		M3 x 13		304 Stainless	24	0.14	3.36	
		M3 x 40		304 Stainless	7	0.27	1.86	
Electronic component	Stepper Motor				5	8	40	Nema 17
	Stepper Motor Driver				5	4	20	TMC2208
	Limit Micro Switch	1A 125V			5	0.28	1.4	SPDT
	Series 3010 Cooling Fan	30 x 30 x 10	mm		1	7	7	12V
	Series 4010 Cooling Fan	40 x 40 x 10	mm		2	5.5	11	12V
	Extruder Feeder				1	14.98	14.98	Ender 3 V2
	Hot End Full Kit				1	15	15	
	Spiral Cable Wrap	6	mm	PE	1	11	11	
	SD Card	2G			1	7	7	
	LCD Display Touch Panel	240X320 with PCB 5V/3.3V	mm		1	16.39	16.39	
	3D Printer Control Board				1	32.99	32.99	Gen L V2.1
	Power Supply	460W 12V38A			1	30	30	
						Total Cost	725.28	

Hot End BOM

Part Name	Dimension	Unit	Material	QUANTITY
V6 HeatSink (Long Distance)	1.75 / 3	mm	All-Metal	1
V6 Heating Block	20 x 20 x10	mm	Aluminum	1
Extruder Nozzles	1.75	mm	Brass	1
High speed Fan Cover (for 3010)				1
Nozzle Throat	1.75 / 3	mm	Stainless Steel	1
Tube Fitting	PC4-01			2
PTFE/teflon tubing	OD: 4; ID: 2	mm		1
Thermistor Temp Sensor	100K	ohm		2
Heat resistant & ventilation	12V/40W NTC			1