

# xBot-Medium BOM

by Morten Nielsen aka BeTrue3D and Dintid

## Bill Of Materials

All prices are approximate without shipping and will change over time.

The total price is the absolute highest possible price.

You can easily shave off €500 by using different heated bed, duex2 instead of duex5 etc.

### Custom Parts:

<https://betrue3d.dk/xbot-medium-look-at-materials-custom-bom/>

### Electronics and Electrical Parts

<https://betrue3d.dk/xbot-medium-electronics-and-electrical-parts-bom-cont/>

### Mechanical Parts

<https://betrue3d.dk/xbot-medium-mechanical-parts-bom-cont/>

## Parts for Dibond frame

Name	Amount	Price #	Price total	Total
xBot Back	1	€ 45,00	€ 45,00	
xBot Bottom	1	€ 45,00	€ 45,00	
xBot Front	1	€ 45,00	€ 45,00	
xBot Left	1	€ 45,00	€ 45,00	
xBot Right	1	€ 45,00	€ 45,00	
xBot Top	1	€ 45,00	€ 45,00	
<b>Total</b>			<b>€ 270,00</b>	<b>€ 270,00</b>

## Steel Rods

Name	Amount	Price #	Price Total	
X-Rods 8mm 367mm	2	€ 5,02	€ 10,04	
Y-Rods 8mm 358mm	2	€ 4,90	€ 9,80	
Z-Rods 8mm 339mm	2	€ 4,66	€ 9,32	
Z-Rods 12mm 339mm	2	€ 5,66	€ 11,32	
X-Rod 6mm 327mm	1	€ 4,50	€ 4,50	
Y-Rod 6mm 302mm	1	€ 4,18	€ 4,18	
Shipping DHL	1	€ 19,00	€ 19,00	
<b>Total</b>			<b>€ 68,16</b>	<b>€ 68,16</b>

## Metal/steel Parts

Name	Amount	Price #	Price Total
Left Motorshield	1		€ 0,00
Right Motorshield	1		€ 0,00
Z-8mm Rod Plates*	2		€ 0,00
Z-12mm Rod Plates*	2		€ 0,00

\* If you can't get steel brackets, you can use 4mm thick aluminium instead. See below

## Aluminium Parts

Name	Amount	Price #	Price Total
5mm PEI Coated printbed 257x229x5mm*	1	€ 54,00	€ 54,00

Z-Liftplate	1	€ 45,00	€ 45,00	
<b>Total</b>			<b>€ 99,00</b>	<b>€ 99,00</b>

\* You can use a heatbed from Ultimaker 2.

## Electronics and electrics

Name	Amount	Price #	Price Total	
Duet Wifi	1	€ 162,30	€ 162,30	
Duex 2/5*	1	€ 116,60	€ 116,60	
Thermocoupler	1	€ 31,00	€ 31,00	
Daughterboard**				
PT100 Daughterboard	1	€ 31,00	€ 31,00	
PanelDue 4.3"***	1	€ 99,89	€ 99,89	
BLTouch SMART	1	€ 39,90	€ 39,90	
Heated Bed****	1	€ 54,00	€ 54,00	
AC Silicone heater 500w	1	€ 40,50	€ 40,50	
SSR DC-AC	1	€ 4,00	€ 4,00	
Chamber Heater 200w Ceramic	1	€ 4,75	€ 4,75	
PTC Heater				
24v 30mm fans for Chamber	3	€ 1,21	€ 3,63	
Heater				
12v 30mm Fans for Printed	2	€ 2,08	€ 4,16	
Objects				
Powersupply HPR-450-24 or similar	1	€ 60,00	€ 60,00	
LED - RGB	1	€ 11,25	€ 11,25	
Front USB Power 5v 3a	1	€ 1,12	€ 1,12	
Rear USB Port	1	€ 1,79	€ 1,79	
<b>Total</b>			<b>€ 665,89</b>	<b>€ 665,89</b>

\* Price listed is for Duex5

\*\* You can do with just 1 and use Thermistor instead or even PT1000 (with 3x zeros) without daugh

\*\*\* Not really necesary. There is not room for 7".

\*\*\*\* 5mm Aluplate or use UM2 heated bed.

## Various electrical mechanical parts

Name	Amount	Price #	Price Total	
Manual on-off switch	1	€ 1,00	€ 1,00	
Limit Switch - Long Arm	2	€ 1,12	€ 2,24	
Limit Switch - Short Arm	3	€ 1,15	€ 3,45	
AC Power plug on/off	1	€ 1,12	€ 1,12	
GX12-2-pin	1	€ 1,00	€ 1,00	
GX12 4-pin	6	€ 1,00	€ 6,00	
GX12-5-pin	1	€ 1,00	€ 1,00	
GX16 8-pin	1	€ 1,00	€ 1,00	
GX16 6-pin	1	€ 1,00	€ 1,00	
GX16 5-pin	1	€ 1,00	€ 1,00	
<b>Total</b>			<b>€ 18,81</b>	<b>€ 18,81</b>

## Motors

Name	Amount	Price #	Price Total
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Nema 17 w. 280 lead screw SKU: 17HS3001-280N	3	€ 26,70	€ 80,10	
X and Y Motors SKU:17HM18-2004S	2	€ 11,90	€ 23,80	
Extruder Motors * SKU:17HM18-2004S	1	€ 11,90	€ 11,90	
Extruder Motors * SKU:17HM08-1204S	2	€ 9,90	€ 19,80	
<b>Total</b>			<b>€ 135,60</b>	<b>€ 135,60</b>
* For 2.85/3mm filament				
** For 1,75mm filament				

## Hotend and parts

Name	Amount	Price #	Price Total	
E3Dv6 Full 1,75mm Bowden	1	€ 63,60	€ 63,60	
PT100 sensor	1	€ 12,50	€ 12,50	
Plated 0.4mm Copper Nozzle	1	€ 11,75	€ 11,75	
Heater Cartridge 40w	1	€ 5,40	€ 5,40	
<b>Total</b>			<b>€ 93,25</b>	<b>€ 93,25</b>

## Mechanical Parts other

Name	Amount	Price #	Price Total	
200GT-2 Belts	2	€ 0,33	€ 0,66	
20-GT2 Pulley 5mm Bore	2	€ 1,33	€ 2,66	
20-GT2 Pulley 8mm Bore	10	€ 0,66	€ 6,60	
610-GT2 Belts	4	€ 0,75	€ 2,98	
Sliders å bushing + spring	4	€ 2,15	€ 8,60	
Bag of Spacers 8mm Bore	1	€ 4,70	€ 4,70	
F688 Flanged Bearings	8	€ 0,42	€ 3,32	
Anti Backlash Nut	3	€ 2,49	€ 7,46	
LMK12LUU Flanged Bearings	2	€ 2,32	€ 4,64	
LM8UU Flanged Bearings	2	€ 2,07	€ 4,14	
Fingerscrews sets of fingerscrew, spring, spacer	3	€ 1,13	€ 3,39	
LM6LUU	2	€ 1,58	€ 3,16	
<b>Total</b>			<b>€ 52,31</b>	<b>€ 52,31</b>

## Screws, Nuts Etc

Name	Amount	Price #	Price Total
m3 8mm Button Head	10		
m3 10mm Button Head	64		
m3 10mm Socket Head	4		
m3 12mm Button Head	21		
m3 16mm Button Head	61		
m3 20mm Button Head	6		
m3 30mm Button Head	8		
m3 20mm Flat Head (countersunk)	3		
m3 Spacer	8		

m3 Square Nuts	45
m3 Nuts	4
m4 10mm Button Head	4
m4 12mm Button Head	8
m4 20mm Button Head	6
m4 Spacer	8
Wires	
Connectors	
Heatshrink	
Wirewrap	

<b>Total Approximate</b>	<b>€ 40,00</b>	<b>€ 40,00</b>
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<b>Totalling:</b>	<b>€ 1.443,02</b>
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terboard