

# Götterdämmerung 1.0

Please consider this printer as experimental. The design and BoM are subject to change. The BoM may contain errors or be incomplete.

Most parts can be bought from eBay

Bill of Materials, 26-jun-2014

Qty	Description	comment
1	Extrusion head gear	
5	Nema 17 0,4 Amp	
2	Nema 17 1,8 Amp	
4 m	T2.5 timing belt (6-10mm width)	
1	100 kOhm thermistor for hot end	
1	10/100 kOhm thermistor for heatbed	optional
2	40x40 PC fan	optional
2	200x300 mm heatbed PCB (wired in parallel)	optional
1	LCD Display + encoder + SD reader	optional
1	Arduino Mega 2560	
1	RAMPS 1.4	
6	Ball bearing (ID 8 H 7 OD 22)	
26	Ball bearing (ID 4 H 4 OD 11)	
6	LM12UU Linear bearing	
6	"Arcade" style microswitches for endstops	
1	12V heater cartridge for hotend	
1	J-Head or J-head compatible hotend	
8 m	40x40 Aluminium extrusion (from Blank ProfilTechnik)	

30	90 degree angle mounting brackets for extrusions	
80	M8 T-nuts	
2 m	M8 threaded bolts (z leadscrews)	
40	6mm m3 screw	
40	20 mm m3 screw	
20	35 mm M4 screw	
70	15 mm M8 screw	
4	Makerbot Stepper Motor Driver 3.3 (Or equivalent)	
1	ATX Power supply (500ish W)	
3 m	12 mm Steel rods	
15	16 mm high, 9 mm belt T2.5 pulleys (internal diameter 4 mm / adapt printed parts for the slightly more common 5 mm axis versions. My brainfade - sorry :). Set screw only needed on two of them). If you buy undrilled aluminium ones, they are easily drilled on a lathe.	
	Printed parts. The .STP files can be imported into autodesk Fusion 360 (free) and probably most solid modelling packages.	
1	40x45 mm (dimensions not critical) aluminium or glass cover for heater PCBs	
8	40x40 end caps for aluminium extrusions	optional

I was able to source all parts from eBay from something in the vicinity of USD 1200 (approx 7000 NOK) including shipping charges and local customs fees.

In Europe, I highly recommend Blank Profiltechnik for aluminium extrusions. They also have an ebay store: <http://stores.ebay.de/blank-profiltechnik>