# RapMan 3.1

A perfect machine for students, educators and hobbyists alike.



The first cost-effective 3D printer kit on the market, available from £795

Desktop sized with large print area (up to 270 x 205 x 210mm)

Affordable materials for uninterrupted production

Reads files directly from SD card - no PC connectivity required

No maintenance contract required







**POWERED BY 3D SYSTEMS** 



## RapMan 3.1 - model options

MAXIMUM BUILD SIZE	RAPMAN 3.1 SINGLE	RAPMAN 3.1 DOUBLE
X Axis	270mm (10 ¾ inches)	190mm (7 ½ inches)
Y Axis	205mm (8 inches)	205mm (8 inches)
Z Axis	210mm (8 ¼ inches)	210mm (8 ¼ inches)
Please note print size will vary from build size and is dependent on print material specifications		
Z Axis Resolution	0.125mm (0.005 inches / 125 microns)	0.125mm (0.005 inches / 125 microns)
Print Tolerance	x and y axis +/- 1% of object dimension or +/-0.2mm (0.008" / 200 microns) whichever is greater. z axis +/- half the processed z resolution  Shrinkage and warpage can occur on models and is material and geometry dependent.	
Print Speed Extruded Volume	Maximum 15mm³ (9/16th "³) per second print and polymer dependent.	
Power Requirements	60 Watts (5A @ 12V)	
Approx. Weight	17kg (37.5 Lbs)	
Overall Dimensions Exc Extruder	650mm (w) x 570mm (l) x 510mm (h)	
Overall Dimensions Inc Extruder	650mm (w) x 570mm (l) x 820mm (h)	
Maximum Extruder Operating Temperature	280°C (536°F)	

# Let the class enjoy the build and learn about basic engineering and assembly skills

It can take between two to three days from opening the box to printing your first parts. The build process is fantastic: a gentle and enjoyable learning experience on its own, where you learn about many different aspects of engineering without realising it! The best part is that once you've built the RapMan 3.1 you can maintain it, so you don't have to pay someone else to!

#### Printing, exploring, designing and developing

Once built and calibrated, the printing fun begins! It's as easy as one, two, three:

- Draw your model in your 3D CAD package and export your file to STL format
- Import it into BFB Axon software, process to G Code and save to SD card
- 3. Insert the SD card into the RapMan 3.1 machine, turn it on and print.

You now have a cost-effective solution which allows you to explore initial design concepts, develop them, and from your findings, turn them into finished objects. It can also be used as a low volume manufacturing tool. The possibilities are endless!

# Understand, interact and educate

The Rapman 3.1 3D printer kit has been designed to be as open and transparent as possible, allowing users to see their creation while it is being built. This increases students' understanding and enhances their interactive education. With RapMan 3.1, teachers have so many different ways to turn traditional subject matter into a fun and enjoyable learning experience.

#### **Education-friendly**

A cost-effective solution allowing hands-on teaching of core engineering skills, while giving young minds the ability to create endless possibilities from the depths of their imaginations!

#### **Low cost Axon engine conversion software**

A recommended additional option to simplify the user experience without losing advanced-user functionality.

### **Affordable investment**

Prices start from £795.

# **Cost-effective modelling**

Polymer prices from £40 per kg.

#### No maintenance contracts

Designed to be easily maintained by the end-user.

#### Easy to build

Comprehensive step-by-step picture and text manual, complemented by an on-screen animated 3D guide.

