

BCN3D Sigma Release 2017



BCN3D

Fabrication should be for everyone

BCN3D Technologies started off as a project of Fundació CIM, which has more than 20 years of experience in Rapid Prototyping and knowledge transfer, leading a technological revolution in the national and international outlook. As a result, we do not only supply 3D printers, but approach and provide the users with the right knowledge and technologies in order for them to develop and realize their own ideas. This procedural change allows people to make their own tools and projects. By merging different kinds of digital manufacturing technologies we are able to obtain products that, otherwise would have not been materialize. We aim to always keep our philosophy of involving everyone to be an active part of the participative technologies.





An enhanced reinvention of 3D printers characterized by its IDEX (Independent Dual Extruder), which allows it to work in a simple and effective way. Print both support structures, multimaterial and multicolor models or even cut down the printing times combining different nozzle sizes.



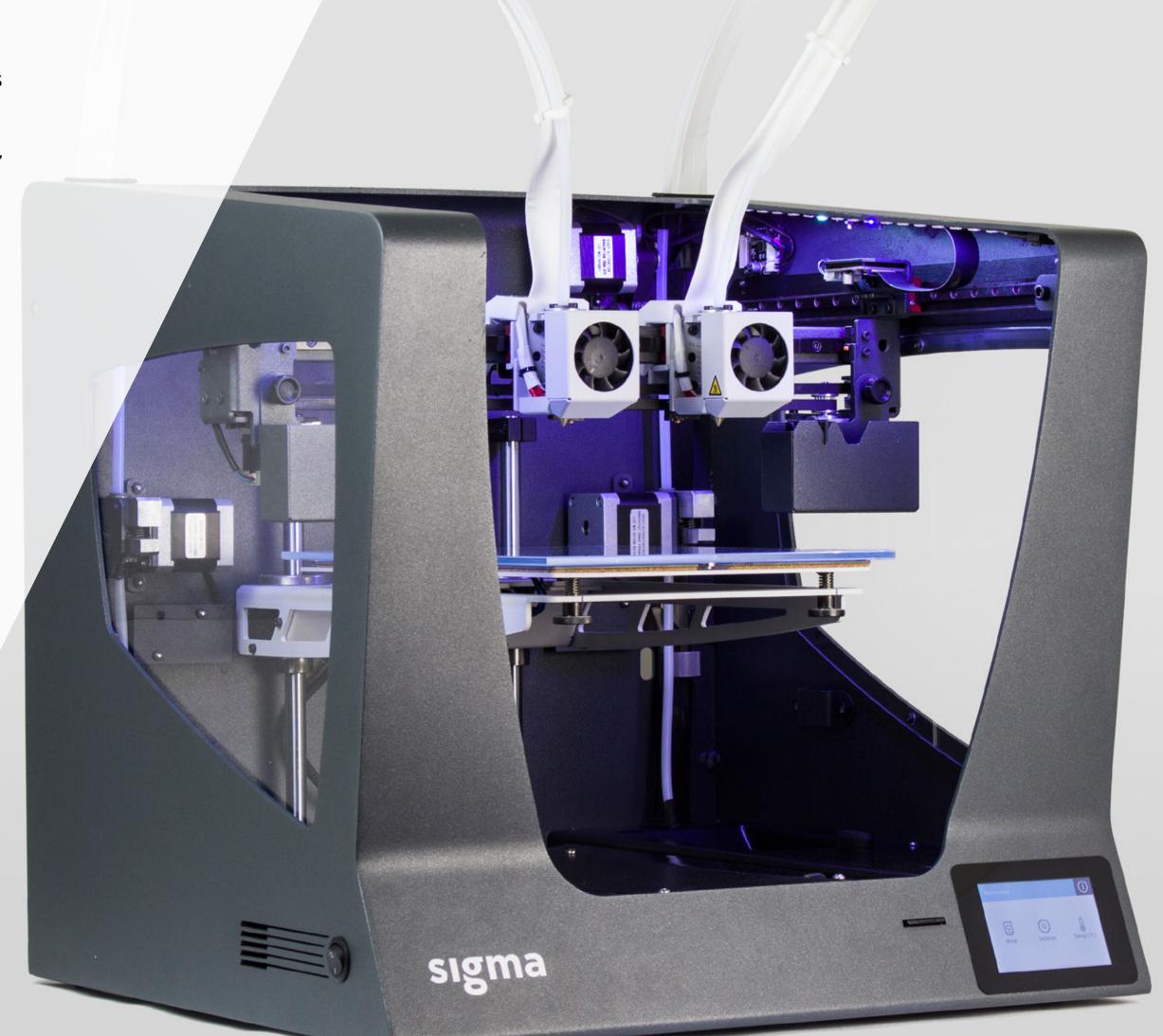
Beyond geometric and material limitations



Faster and quieter than ever before



Even more reliable and accurate





A new standard

The unique Independent Dual Extruder system allows to print 2 different materials or colours while ensures the finest surface finish. The idle toolhead remains parked, preventing the dripping of molten plastic onto the part.

You choose: MULTIMATERIAL **OR MULTICOLOR**

Create functional parts by combining the properties of two different materials, like rigid and flexible filaments. Or make your designs more attractive by printing with two colours.







PRINT FURTHER, **PRINT SOLUBLE SUPPORTS**

Avoid geometric limitations and print the most challenging parts thanks to soluble supports. Just immerse the model into water and watch the supports vanish.





Such a big family

A hotend suitable for each moment: print either the tiniest or the biggest model, use abrasive filaments to materialize your functional part or take the best profit of the IDEX system by combining different nozzle sizes.

STRONG AND INTRICATE

Enhance the interlayer adhesion using bigger nozzle diameters, even for complex models where support structures are required.



FAST YET DETAILED Print up to three times faster without giving up quality: finer outlines and coarser infills.

QUIET LIKE A BREEZE

Reengineered cooling strategies allow to keep up the performance while reduce drastically the operating sound. Put a Sigma on your desktop!

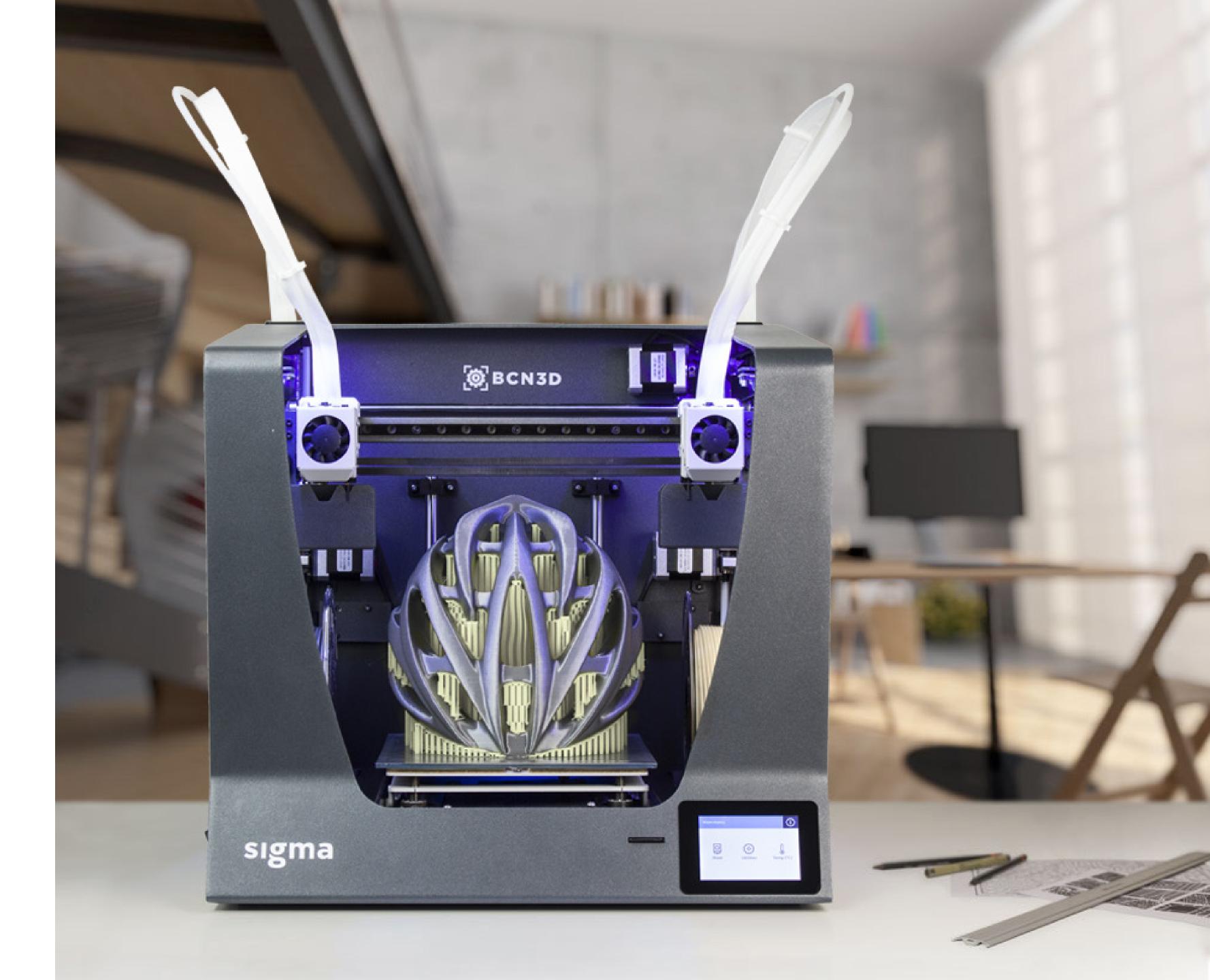
ACCURACY REDEFINED

Redesigned stepper drivers and improved power management set a new milestone in the accuracy of FFF 3D printers.





Shy-light by Virtox http://www.thingiverse.com/thing:29876.



FEEL THE TOUCH

colour touchscreen. The attractive and intuitive interface is fully equipped with advanced features that guides the user step by step.



OPEN FILAMENT SYSTEM, UNLIMITED VERSATILITY

With its optimized full metal hotends the Sigma can print any material you need to fit your requirements, from the common PLA to the most advanced technical plastics like Nylon or PC, independently the manufacturer.

Compatible materials

PLA - ABS - PVA - CPE - Nylon - TPU - HIPS - Specials



PROVEN RELIABILITY

The BCN3D Sigma made it to the "Best of Workhorse 3D Printers" in the 3D Hubs 2017 3D Printer Guide, based on more than 8000 reviews from 3D Printer owners: a huge recognition among more than 500 competitors.



AN IS NOT THE OWNER.

Do you want to know more? WE ARE OPEN SOURCE!

As an Open Source project, we share all the designs, manufacturing processes and quality protocols with the Community to speed up the evolution of 3D Printing.



SPECIFICATIONS

PHYSICAL DIMENSIONS

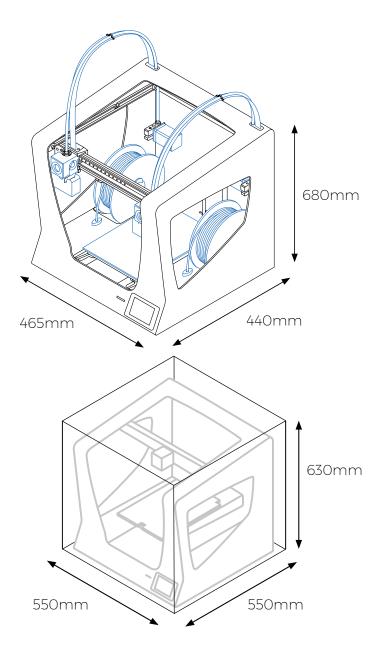
PRINTER PROPERTIES

Overall dimensions **465mm x 440mm x 680mm** (including cables)

Weight: **15kg** (without filament spools)

Shipping box dimensions 550mm x 550mm x 630mm

Shipping weight: 21kg



Architecture Independent Dual Extruder (IDEX)

Technology Fused Filament Fabrication (FFF)

Build Volume **210mm x 297mm x 210mm**

Extruders: 2

Nozzle diameter 0,3mm / 0,4mm (Standard) / 0,6mm / 0,8mm / 1,0mm

Heated bed

PCB

Screen

Full Color Capacitive TouchPAD

Electronics BCN3D Electronics v1.0 Independent Stepper Drivers

Firmware

BCN3D Sigma – Marlin

Supported files

gcode

Operating Sound

58 dB(A)

Certifications

CE/FCC

Connectivity **SD Card** (autonomous) **USB**

PRINTING PROPERTIES

MATERIALS

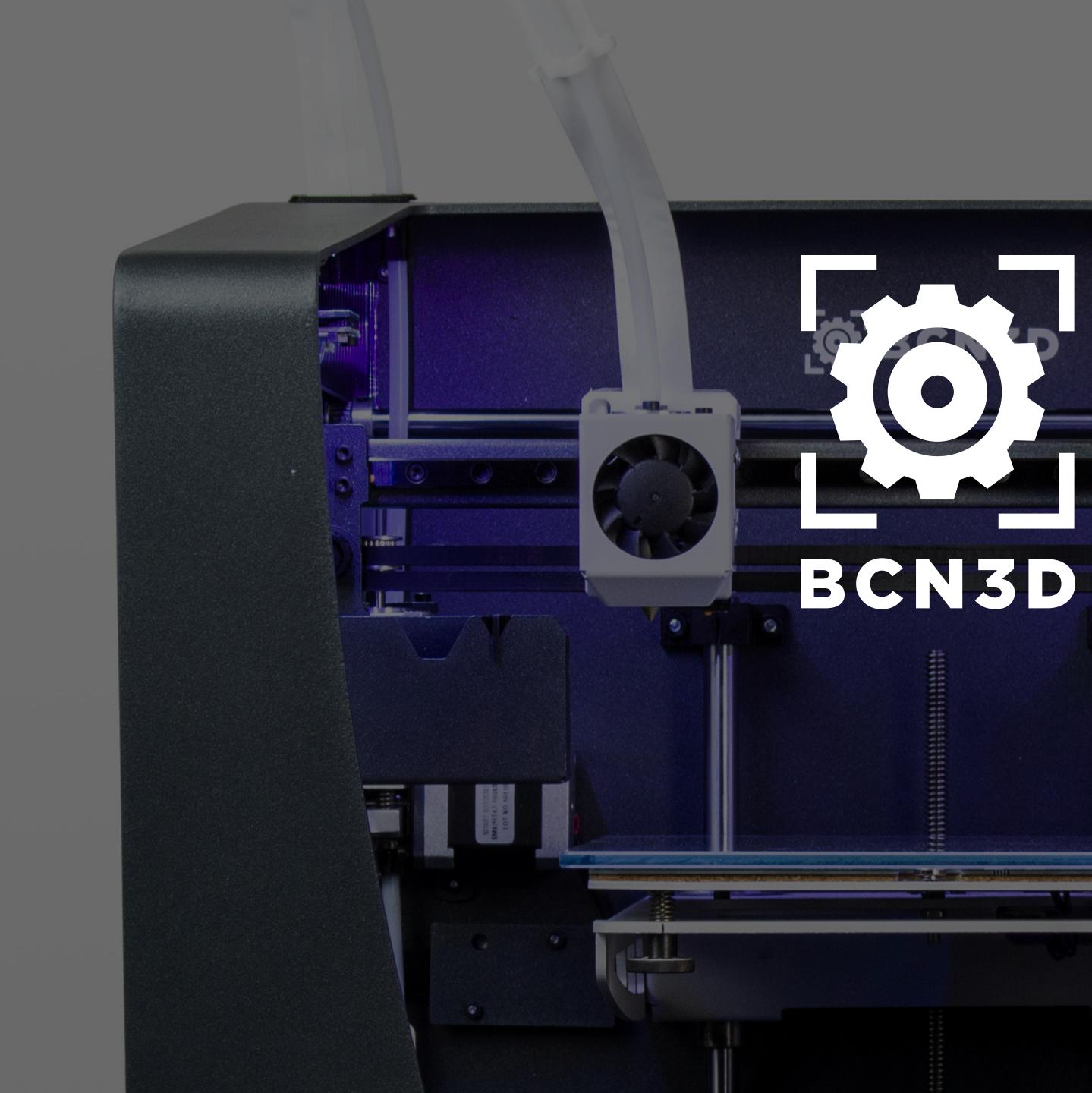
Layer height	Extruder maximum printing	Filament diameter
0,05 – 0,5mm	temperature	2,85 ± 0,05 mm
(depending on the nozzle	280°C	
diameter)		Compatible Materials
	Heated bed maximum	PLA
Positioning resolution (X/Y/Z)	temperature	ABS
1,25μm / 1,25μm / 1μm	100°C	PVA
		Co-polyesters
Operating temperature	Support Material	Nylon
15°C - 35°C	PVA for PLA // HIPS for ABS	TPU
		HIPS
Extruder maximum temperature		Specials

290°C

SOFTWARE

ELECTRIC PROPERTIES

File preparation software	Input	
Cura-BCN3D, Simplify3D, Slic3r	AC 84-240V, AC 3,6-1,3A, 50-60Hz	
Operative Systems	Output	
Windows, Mac, Linux	24V DC, 13A	
Supported files	Power Consumption	
STL, OBJ, AMF	240W	



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