sigmax

BCN3D Sigma*x*

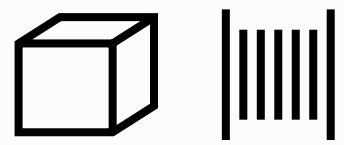# BCN3D
Sigma*x*

The BCN3D Sigma*x* is a professional FFF 3D printer characterized by its impressive printing volume and Independent Dual Extruder (IDEX) system. These main features turn the Sigma*x* in the most versatile 3D printer in the market, ideal for those who need to print big, complex parts or increase their productive capacity.
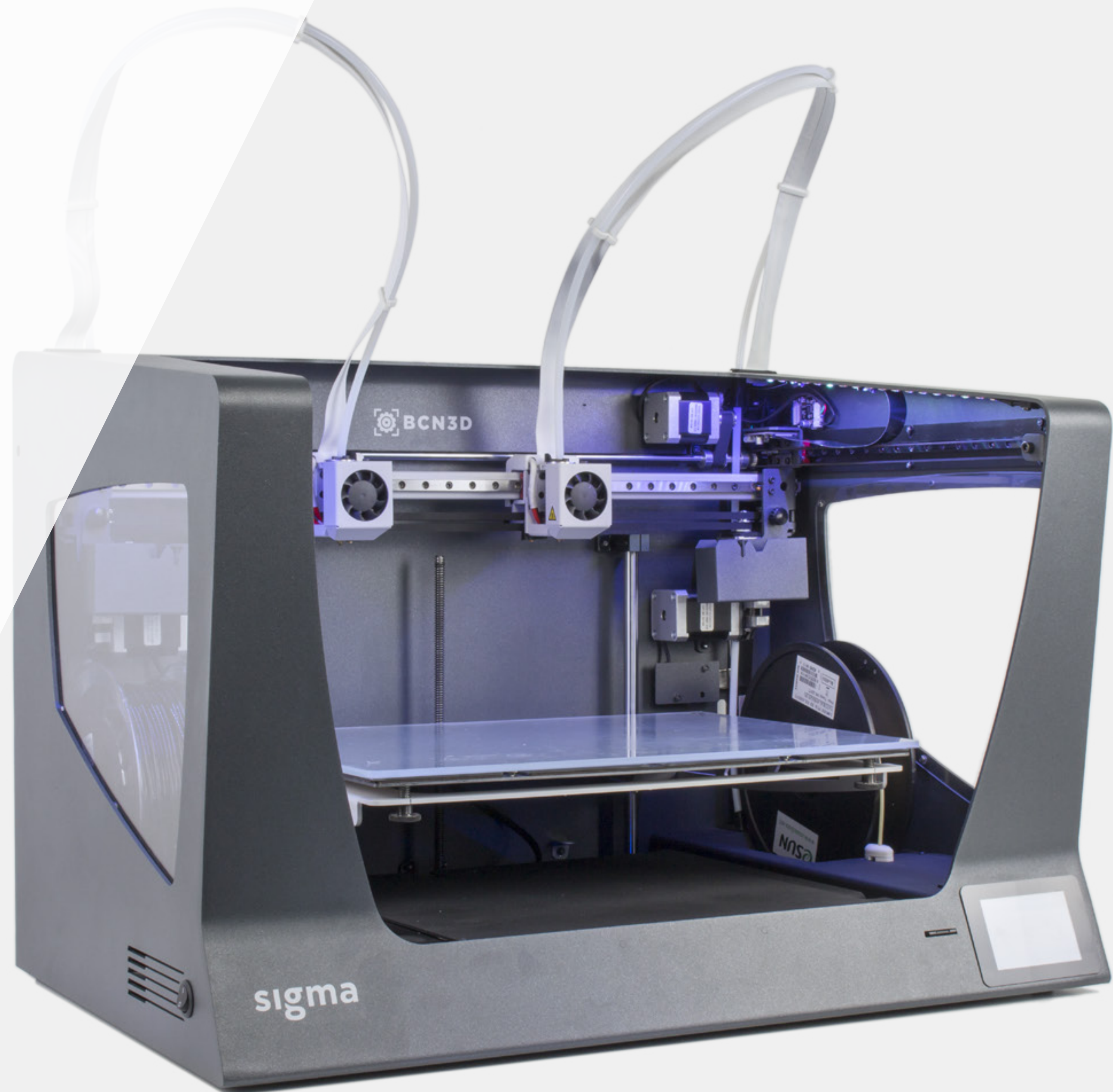
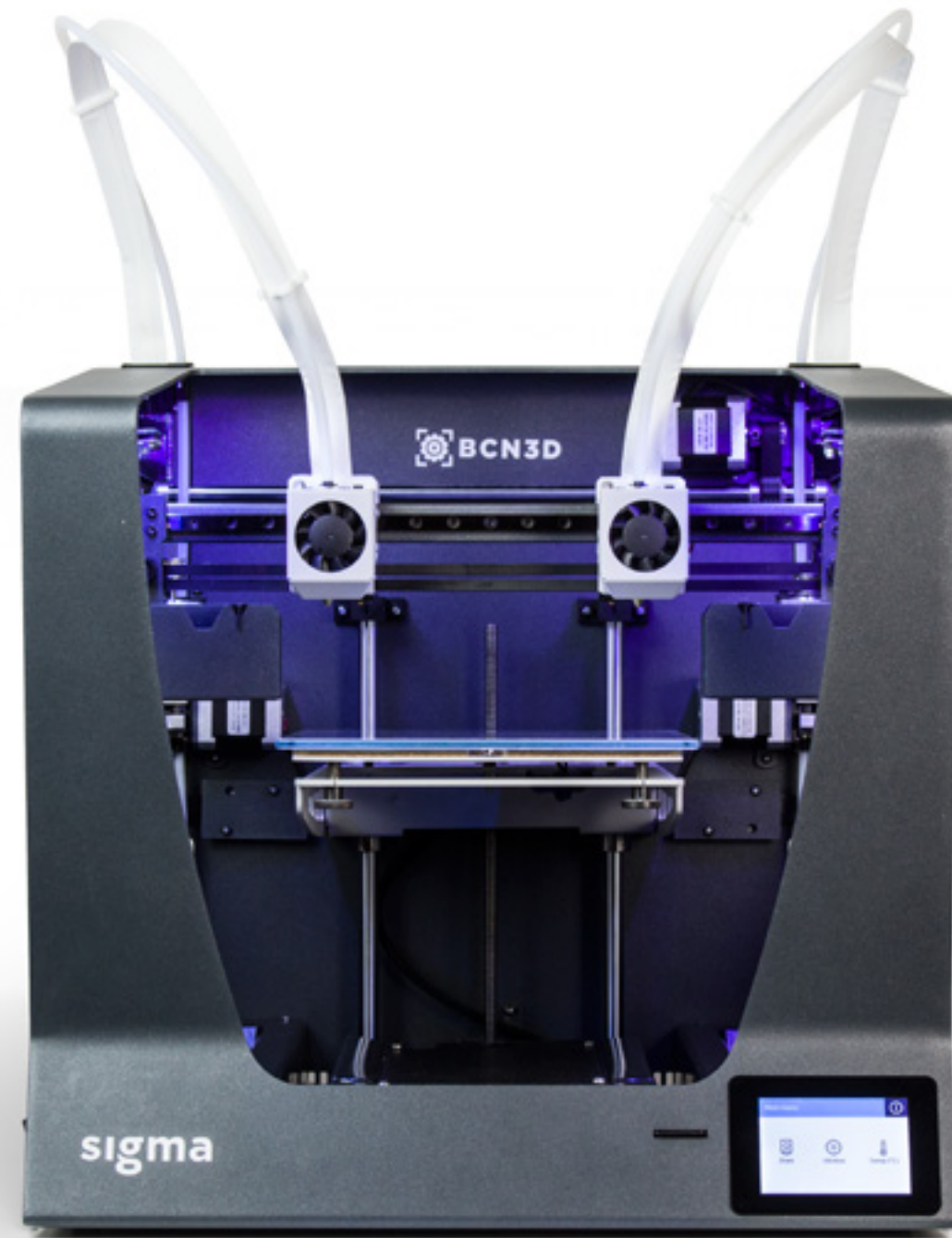Beyond geometric and material limitations
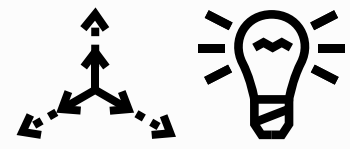
Capture even bigger ideas
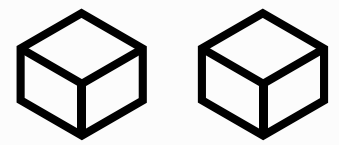
Duplicate your productivity

Sigma R2017

- **Overall dimensions:**
  465mm x 440mm x 680mm

- **Build Volume:**
  210mm x 297mm x 210mm

- **Printing modes:**
  Simple
  IDEX

- **Default hotend:**
  0,4mm
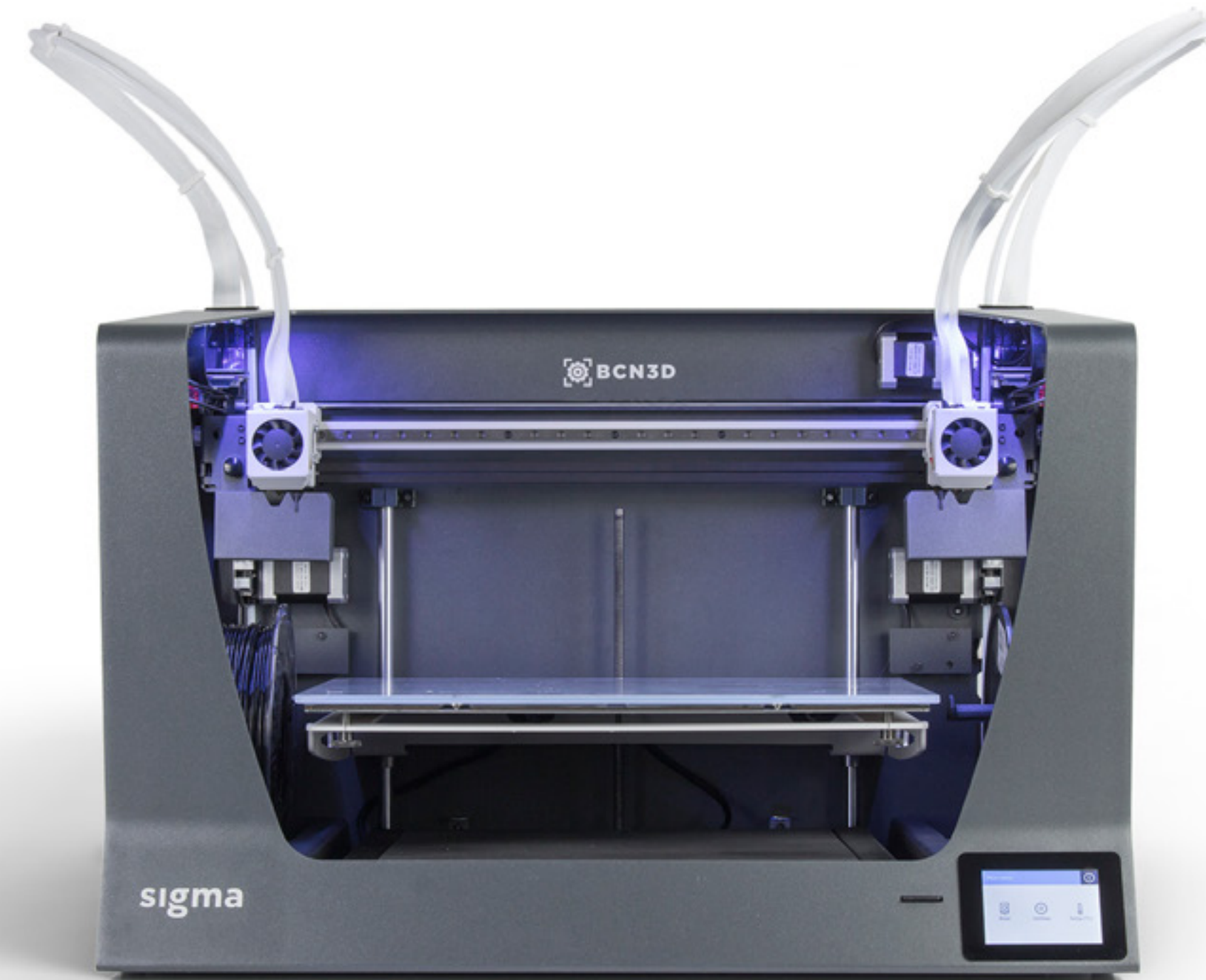
Sigma*x*

- **Overall dimensions:**
  665mm x 440mm x 680mm

- **Build Volume:**
  420mm x 297mm x 210mm

- **Printing modes:**
  Simple
  IDEX
  Mirror
  Duplicator

- **Default hotend:**
  0,6mm

IIDEX

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.
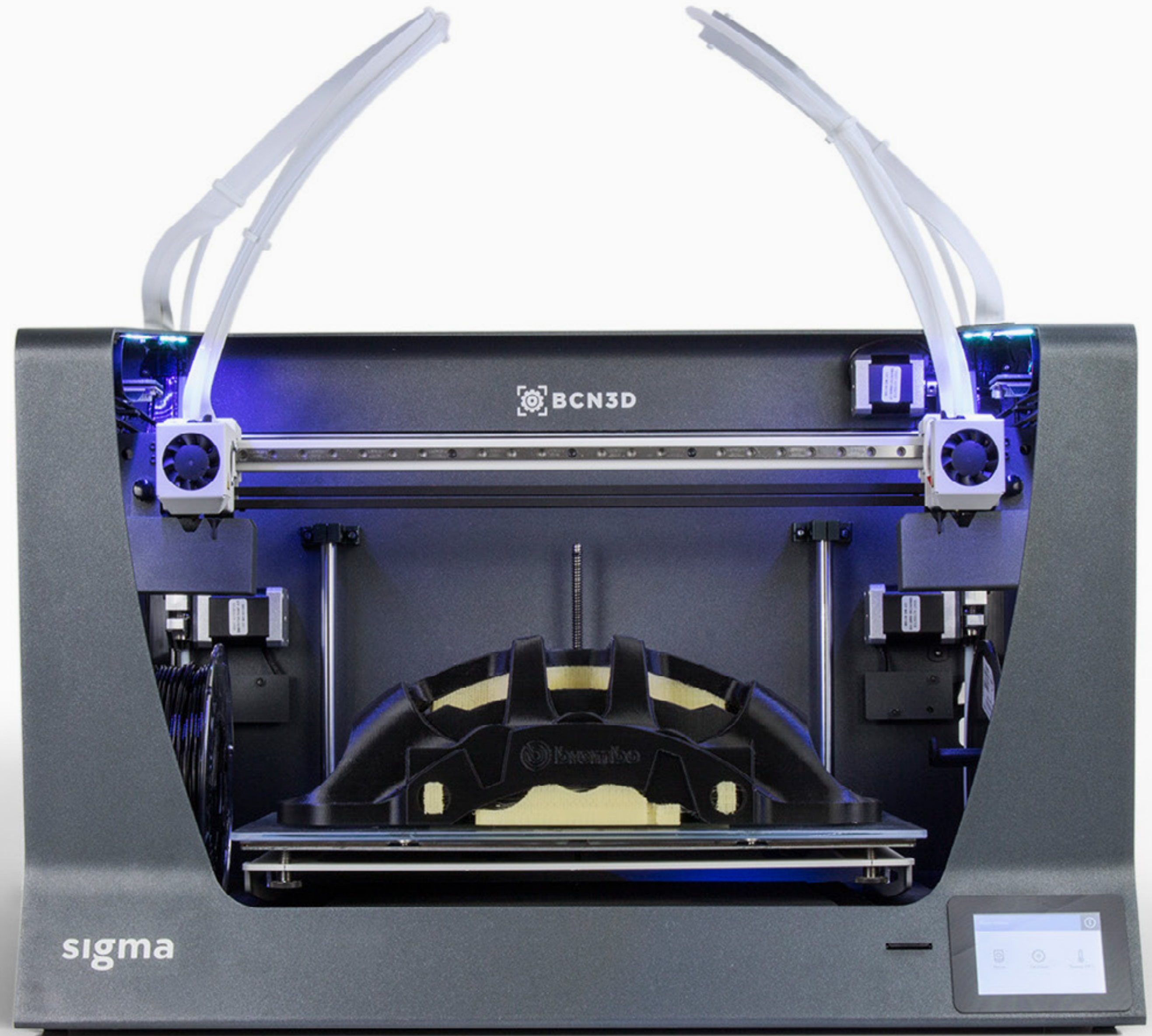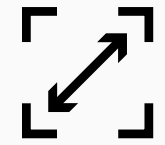
SCALE UP YOUR PROJECTS

Because sometimes size matters, the
Sigma*x* features a massive printing volume
of 420x297x210mm.

Produce larger-scale functional parts and
get rid of dividing or scaling down models:
volume will be no longer a limitation.

Don't constrain your ideas, just make
them real.

BOOST YOUR PRODUCTIVITY

The Sigma*x* is not just a rapid prototyping machine, but a mighty production center. Thanks to its IDEX system, it features two highly productive printing modes:

- **Duplication mode:** Print the same model with both toolheads simultaniously and, therefore double printing capacity.
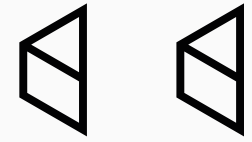
- **Mirror mode:** Print the model and its symmetrical part at once, increasing iteration speed and shortening design times.
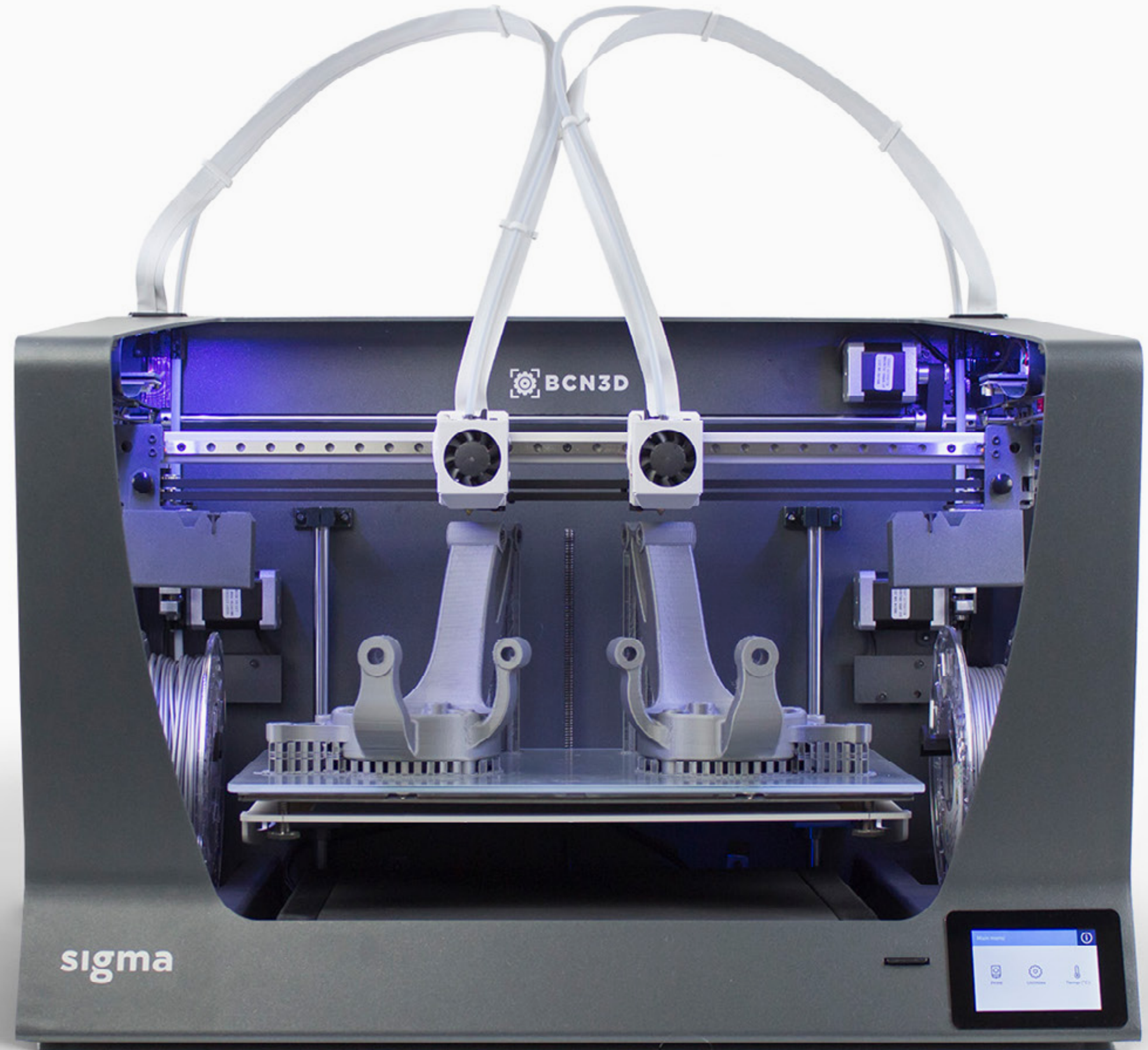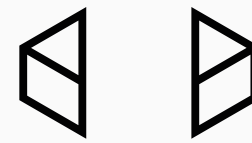
SPECIFICATIONS

PHYSICAL DIMENSIONS

Overall dimensions
675mm x 440mm x 680mm
((including cables)

Weight: **18kg**
(without filament spools)

Shipping box dimensions
760mm x 550mm x 630mm

Shipping weight: **24kg**

PRINTER PROPERTIES

Architecture
Independent Dual Extruder
(IDEX)

Technology
Fused Filament Fabrication (FFF)

Build Volume
420mm x 297mm x 210mm

Extruders: **2**

Nozzle diameter
0,3mm / 0,4mm / 0,5mm (Special)
/ **0,6mm** (Standard) / **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
50 dB(A)

Certifications
CE / FCC

Connectivity
SD Card (autonomous)
USB

PRINTING PROPERTIES

Layer height
0,05 – 0,5mm
(depending on the nozzle
diameter)

Positioning resolution (X/Y/Z)
12,5μm / 12,5μm / 10μm

Operating temperature
15°C – 35°C

Extruder maximum temperature
290°C

Extruder maximum printing
temperature
280°C

Heated bed maximum
temperature
100°C

Support Material
PVA for PLA // HIPS for ABS

SOFTWARE

File preparation software
Cura-BCN3D, Simplify3D

Operative Systems
Windows, Mac, Linux

Supported files
STL, OBJ, AMF

ELECTRIC PROPERTIES

Input
AC 84-240V, AC 7,2-2,6A, 50-60Hz

Output
24V DC, 26A

Power Consumption
480W

MATERIALS

Filament diameter
2,85 ± 0,05 mm

Compatible Materials
PLA
ABS
PVA
Co-polyesters
Nylon
TPU
HIPS
Specials

BCN3D