# Specifications

## BCN3D Epsilon W27 (Gen 2)

![BCN3D Epsilon W27 (Gen 2) Diagram](image)

## Printer properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Printing Technology</td>
<td>Fused Filament Fabrication (FFF)</td>
</tr>
<tr>
<td>Architecture</td>
<td>Independent Dual Extruder (IDEX)</td>
</tr>
<tr>
<td>Printing volume</td>
<td>420mm x 300mm x 220mm (16.5” x 11.8” x 8.7”)</td>
</tr>
<tr>
<td>Build chamber</td>
<td>Passive Heated Chamber</td>
</tr>
<tr>
<td></td>
<td>Fully enclosed</td>
</tr>
<tr>
<td></td>
<td>Safety Pause</td>
</tr>
<tr>
<td>Air filtering</td>
<td>Category H13 HEPA filter</td>
</tr>
<tr>
<td></td>
<td>Active Carbon filter</td>
</tr>
<tr>
<td>Number of extruders</td>
<td>2</td>
</tr>
<tr>
<td>Warranty</td>
<td>1 year for EU countries</td>
</tr>
<tr>
<td></td>
<td>1 year for non-EU countries</td>
</tr>
<tr>
<td>Extruder system</td>
<td>Extruder Bondtech™ high-tech dual drive gears</td>
</tr>
<tr>
<td></td>
<td>Hotends optimized</td>
</tr>
<tr>
<td>Printing modes</td>
<td>Single mode</td>
</tr>
<tr>
<td></td>
<td>Duplication mode</td>
</tr>
<tr>
<td></td>
<td>Mirror mode</td>
</tr>
<tr>
<td></td>
<td>Multimaterial mode</td>
</tr>
<tr>
<td></td>
<td>Soluble Supports mode</td>
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<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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</table>
| **Automatic Calibration System** | Based on a piezoelectric sensor  
Main features:  
* Accurate Z homing  
* Quick assisted bed leveling  
* Automatic XYZ offset extruder calibration  
* Automatic Mesh Mapping |
| **Electronics**             | Single Board Computer: Toradex ARM Compute Module  
Motion Board: BCN3D Electronics with Independent Stepper Drivers |
| **Firmware**                | BCN3D Embedded Linux distribution  
BCN3D Epsilon - Marlin |
| **Heated bed**              | Silicone thermal pad                                                     |
| **Screen**                  | 5” full color capacitive touchscreen                                     |
| **Supported languages**     | Spanish  
English  
German  
French  
Italian  
Japanese  
Portuguese  
Chinese |
| **Supported files**         | *.gcode                                                                |
| **Operating sound**         | 49 dB(A)                                                                |
| **Nozzle diameter**         | Brass nozzle: 0.4mm (default) | 0.6mm | 0.8mm | 1.0mm  
Hotend X: 0.6mm - Hotend M: 0.4mm |
| **Certifications**          | CE / FCC                                                                |
| **Connectivity**            | Offline printing: SD card  
Online printing: WiFi or Ethernet (through BCN3D Cloud) |

### Materials

<table>
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</tr>
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<tbody>
<tr>
<td><strong>Filament diameter</strong></td>
<td>2.85 ± 0,05 mm</td>
</tr>
</tbody>
</table>
| **Compatible materials**    | Standard materials: PLA, PET-G, TPU 98A, BVOH  
Technical materials: ABS, PP, PA  
Composite materials (only with Hotend X): PP GF30, PAHT CF15, PET CF15  
Metal materials (only with Hotend M): Ultrafuse 316L, Ultrafuse 17-4 PH |
| **Open filament system**    | Yes                                                                     |

Specifications subject to change. EN-DS-EW27(Gen 2)-v1.2
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**BCN3D Epsilon W27 (Gen 2)**

#### Physical properties

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<tbody>
<tr>
<td><strong>Overall dimensions</strong></td>
<td>690mm (W) x 530mm (D) x 750mm (H) (27.2&quot; x 20.9&quot; x 29.5&quot;)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>43.9kg (96.7 lb)</td>
</tr>
<tr>
<td><strong>Shipping box dimensions</strong></td>
<td>800mm (W) x 600mm (D) x 1230mm (H) (31.5&quot; x 23.6&quot; x 48.4&quot;)</td>
</tr>
<tr>
<td><strong>Shipping weight</strong></td>
<td>61kg (134.4 lb)</td>
</tr>
<tr>
<td><strong>Shipping method</strong></td>
<td>Half Europallet</td>
</tr>
</tbody>
</table>

#### Printing properties

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended profiles</strong></td>
<td>Layer height: 0.2mm</td>
</tr>
<tr>
<td><strong>Layer height</strong></td>
<td>0.05mm - 0.5mm (custom profiles)</td>
</tr>
<tr>
<td><strong>Positioning resolution (X / Y / Z)</strong></td>
<td>1.25µm</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>15 °C - 30 °C</td>
</tr>
<tr>
<td><strong>Extruder maximum temperature</strong></td>
<td>300 °C</td>
</tr>
<tr>
<td><strong>Heated bed maximum temperature</strong></td>
<td>120 °C</td>
</tr>
<tr>
<td><strong>Build chamber maximum temperature</strong></td>
<td>60 °C (depending on operating temperature)</td>
</tr>
</tbody>
</table>

#### Electric Properties

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<tbody>
<tr>
<td><strong>Input</strong></td>
<td>AC 100-240V, AC 8.4-3.5A, 50-60Hz</td>
</tr>
<tr>
<td><strong>Maximum power consumption</strong></td>
<td>840W</td>
</tr>
</tbody>
</table>

#### Software

<table>
<thead>
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<tbody>
<tr>
<td><strong>File preparation software</strong></td>
<td>BCN3D Stratos</td>
</tr>
<tr>
<td><strong>Operating Systems</strong></td>
<td>Windows, Mac, Linux</td>
</tr>
<tr>
<td><strong>Supported files</strong></td>
<td>STL, 3MF, OBJ, AMF, DAE, ZAE, CTM, PLY, X3D, GLB, GLTF</td>
</tr>
<tr>
<td><strong>Wireless connectivity</strong></td>
<td>BCN3D Cloud</td>
</tr>
<tr>
<td><strong>Supported browsers</strong></td>
<td>Google Chrome, Mozilla Firefox, Microsoft Edge, Safari, Opera</td>
</tr>
</tbody>
</table>

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Support Plans

The Epsilon Support Plans are designed to provide better customer satisfaction, improved ROI and reduced downtime. The plans are available in the form of either a 1 year, 2 year or 3 year term. The 1 year plan runs alongside our standard 12 month warranty. The 2nd and 3rd year plans include an extension of the warranty.

Contents of the Epsilon Support Plan: Priority email & online chat support (response time less than 24h), access to a dedicated support phone line (08:30 - 17:30 CET), 1 hour call with BCN3D Applications Engineer (1 month after installation), BCN3D Maintenance Kit and Extended Warranty (on 2nd and 3rd Year Plans).