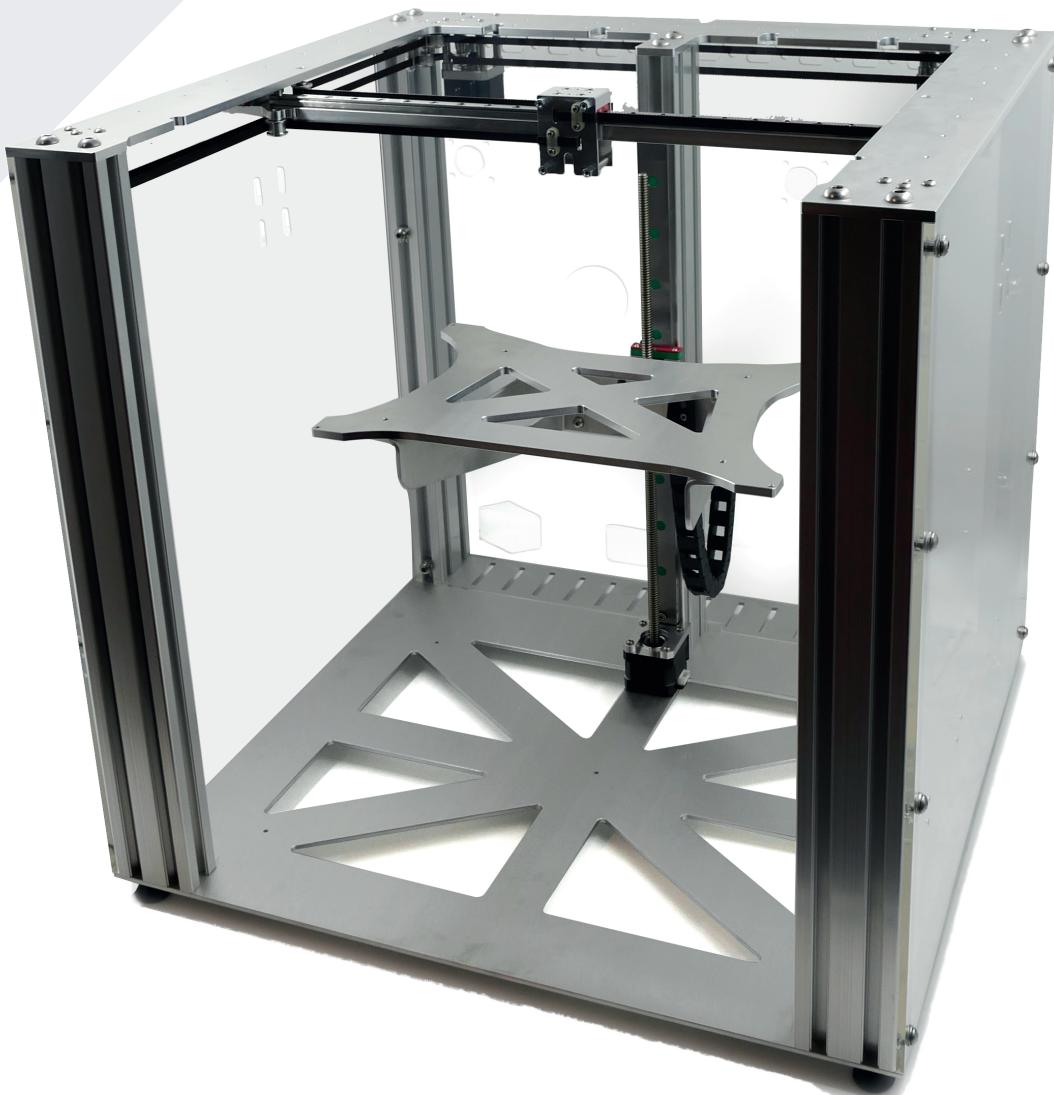


Motion System Datasheet



Tool Positions

- Up to 4 standard tools
- Max tool dimension:
 - X: 88mm
 - Y: 60mm
 - Z: 100mm

Build Volume

- The following dimensions are given for the Motion System equipped with the Bowden V6 tool and high temperature heated beds.
 - X: 300mm
 - Y: 200mm
 - Z: 290mm

Volume & Dimensions

- Overall
 - Height: 800mm
 - Weight: 550mm
 - Length: 580mm
- Frame
 - Height: 510mm
 - Width: 540mm
 - Length: 505mm
- Mass: ~20kg

Movements & Accelerations

- Toolhead & bed not fitted
 - Recommended maximum travel speed: 800mm/s
 - Recommended maximum acceleration: 300mm/s²
 - Maximum travel along X axis: 363mm
 - Maximum travel along Y axis: 280mm
 - Maximum travel along Z axis: 325mm
- E3D ToolChanger & E3D high temperature heated beds fitted
 - Recommended maximum travel speed: 600mm/s
 - Recommended maximum acceleration: 200mm/s²
 - Maximum travel along X axis: 363mm
 - Maximum travel along Y axis: 265mm
 - Maximum travel along Z axis: 285mm

Motor Specifications

- X axis / Y axis:
 - 1.8°/step (200step/turn)
 - 2A/phase
 - 40mm body length
- Z axis:
 - 1.8°/step (200step/turn)
 - 1.6A/phase
 - 34mm body length
 - 385mm TR8*2 integrated leadscrew

Belts & Pulleys

- Belts: 6mm Gates Unitta 2GT
- Motor pulleys: 16T Gates Unitta 2GT
- Toothed idlers: Gates Unitta 2GT
- Smooth idlers: Gates Unitta 2GT

Operating Conditions

- Place machine in a well-ventilated room on a rigid, horizontal and vibration free surface. Keep away from water and other fluids. Keep out of reach of children and vulnerable people.
- Minimum operating temperature: 5°C
- Maximum operating temperature: 40°C

Maintenance

- Every 20 prints / 50hours, whichever comes first:
 - Clean rails from any debris
 - Clean any plastic debris from belt path, cartridges and motors
 - Check belts have sufficient tension and that tension is even, adjust accordingly
 - Check bed is level
- Every 100 prints / 200hours, whichever comes first:
 - Inspect rails and cartridges for play
 - Inspect belts and teeth, look for thinning rubber or lower tooth profiles
 - Inspect pulleys and idlers for play
 - Inspect lead-screw for play
 - Inspect homing grubscrews for wear
 - Lubricate rails and cartridges, see Hiwin for maintenance instructions
https://www.hiwin.com/pdf/lubricating_instructions.pdf
 - Lubricate lead screw with magnalube