

Parametric Hinged Storage Box with Snap-Fit Lid (Customizable SCAD)

Luca Koch

VIEW IN BROWSER

updated 15. 1. 2026 | published 15. 1. 2026

Summary

Fully parametric storage box with hinged snap-fit lid,you can easily customize dimensions, wall thickness, and tolerance

3D Printers > Accessories

This is a **fully parametric storage box** with a **hinged, snap-fit lid**, designed in **OpenSCAD (you need to install BOSL2)** .
All key dimensions can be adjusted, making it easy to adapt the box to your specific needs.

The design is optimized for **3D printing**, with clean geometry, strong hinges, and a satisfying snap closure.

Customization

The included **.SCAD file** allows you to adjust:

- Box width, depth, and height
- Wall thickness
- Lid and hinge tolerances
- Overall proportions

Simply open the SCAD file in OpenSCAD, change the parameters, render (F6), and export your own STL.

Printing Recommendations

- **Material:** PLA, PETG, ABS (PETG recommended for flexible snaps)
- **Layer height:** 0.2 mm
- **Infill:** 15–25%
- **Supports:** Not required
- **Orientation:** Print box and lid as provided

Notes

If you make a remix or customized version, feel free to share it --> I'd love to see how you use it!

Model files



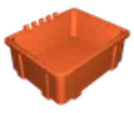
parametric-hinged-storage-box.scad



sample-latch.stl



sample-lid.stl



sample-box.stl

License

This work is licensed under a
Creative Commons (4.0 International License)

Attribution

✖ | Sharing without ATTRIBUTION
✔ | Remix Culture allowed
✔ | Commercial Use
✔ | Free Cultural Works
✔ | Meets Open Definition