# OpenDTU Socket Outlet Enclosure

stritti

VIEW IN BROWSER

updated 1. 7. 2024 | published 1. 7. 2024

## Summary

Slightly over-engineered housing for OpenDTU which could be plugged directly to socket outlet (EURO-/ SCHUKO-plug).

| 2.82 hrs | 2 pcs | 0.20 mm | 0.40 mm | PLA | 70 g | Prusa MINI / MINI+ |
|---|---|---|---|---|---|---|

Hobby & Makers > Electronics

Tags: case housing balkonsolar opendtu balkonkraftwerk

This is a special case for the OpenDTU breakout board by blinkyparts.com which could be attached directly to a socket outlet (SCHUKO)

## Printing instructions

### Backside

- Material: PLA, PETG, ...
- Perimeter: 2
- Infill: 15%
- Supports: yes, I used organic support.

### Front cover

Should be printed with front side on the bed.

- Material: PLA, PETG, ...
- Perimeter: 2
- Infill: 15%
- Supports: no

## BoM

| Quantity | Name | Picture | Link (example, no affiliate) |
|---|---|---|---|
| 1 | **OpenDTU** Breakoutboard by blinkyparts.com | | https://shop.blinkyparts.com/en/OpenDTU-Breakoutboard-Your-evaluation-for-your-balcony-solar-system/blink237542 |
| 1 | USB power supply unit | | https://amzn.eu/d/0igDwA8U |
| 1 | USB Cabel | | https://amzn.eu/d/02PisvVq |

## Assembly

1. First place the OLED-Display within the cover. See pictures.
2. Connect the display and the circuit board with the cables
3. Attach USB-C cable to circuit board
4. Clip the circuit board together with antenna board attached within the case. Pay attention that the LEDs are placed correct in the wholes. maybe you have to adjust them.
5. Pass external antenna through the whole and screw it on the base.
6. Push USB power supply in back element. Should be a little bit tight.
7. Attach USB-A of cable to the power supply.
8. Do a short test by plug in power socket and check if everything works and is connected correct.
9. At last step push backside into back of front part. It should snap in.

# This remix is based on

**OpenDTU Breakoutboard Case**

by Timo

**Schuko Adapter**

by Max Mustermann

## Model files

**opendtu_cover.3mf**

**opendtu_backside.3mf**

## Print files

**opendtu_backside_04n_02mm_pla_miniis_56m.bgcode**

PLA 0.40 mm 0.20 mm 0.94 hrs 18 g Prusa MINI / MINI+

**opendtu_cover_04n_02mm_pla_miniis_1h53m.bgcode**

PLA 0.40 mm 0.20 mm 1.88 hrs 52 g Prusa MINI / MINI+

## License

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

**Attribution-ShareAlike**

---

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