High Voltage Power Supply

For this project, the use of a good quality commercial high voltage power supply is recommended. However, if you decide to design your own HV PSU, you can find the suggested dimensions below.
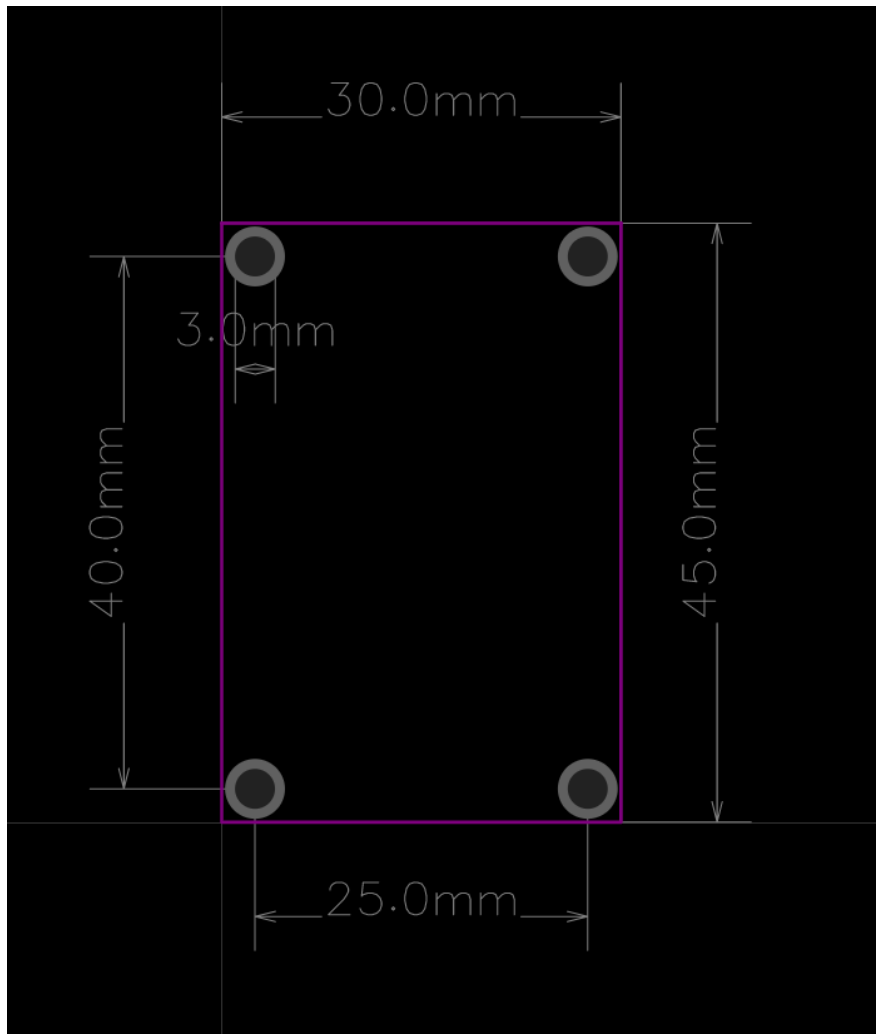
The HV PSU must be able to deliver at least 50 mA at 170VDC with an input voltage of 12V DC without generating a lot of heat.

⚠️ **Add an appropriate fuse for the HV rail to protect your device from overcurrent!**

The voltage should be stable for the entire current range. A calculator is not like a clock, the number of turned-on nixies is not constant. Also check the PSU for audible noise, you don't want to have a noisy device on your desk.

You may need to change the firmware to correctly drive the enable/shutdown pin of your HV PSU. Currently the firmware sets the HVENABLE pin to HIGH (+3.3V) to enable the HV.

Suggested dimensions:

I've designed a 3D printed adapter for a popular commercial Nixie HV PSU. Maybe the adapter is useful for someone, it provides the missing mounting holes.

The adapter consists of 2 parts: 3DPrints/STL/HVFIX Part 1.stl and 3DPrints/STL/HVFIX Part 2.stl. Additionally, you will need 6 x M3 square nuts and 6 x M3 6mm screws.