High Voltage Power Supply

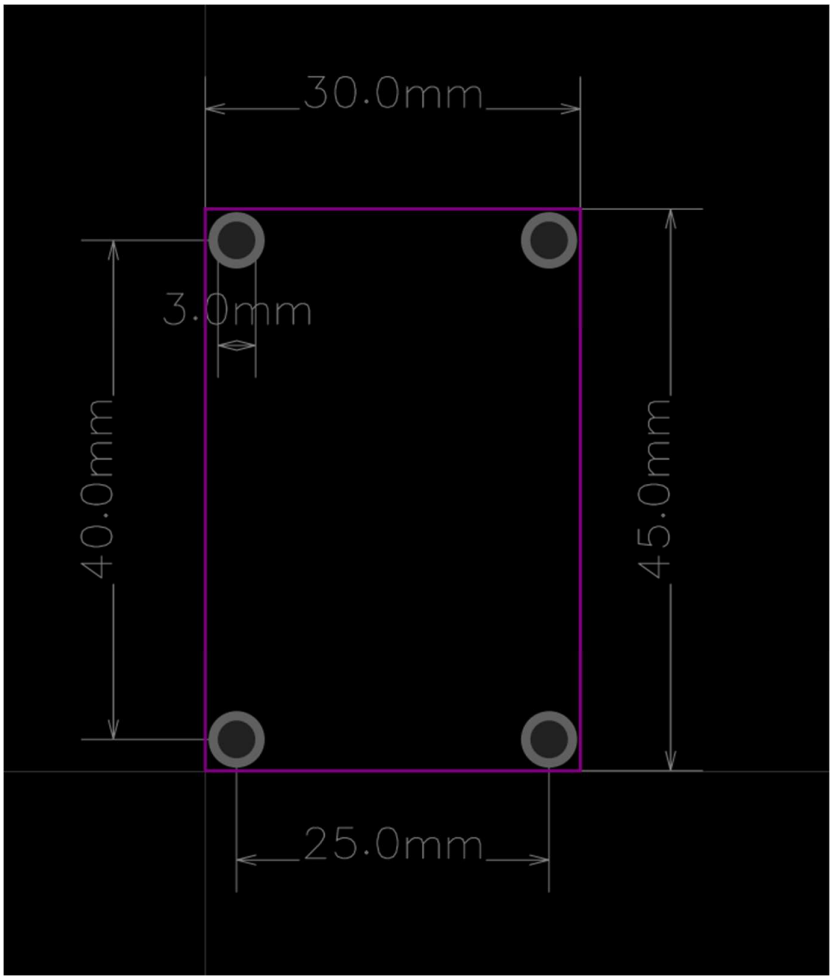
I do not provide the design of the HV power supply. You can build your own or buy a commercial one. Make sure you don't get a fake one!

The PSU must be able to deliver at least 45 mA at 170VDC with an input voltage of 12V DC without generating a lot of heat. 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.

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

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.

The picture shows the dimensions of the HV power supply I designed for this project. It fits into the case, and it is attached with 4 screws.



As already mentioned, for this project I use my own nixie power supply, but I designed this adapter for a popular commercial one of the same size. Maybe the adapter is useful for someone, it provides the missing mounting holes.