



Mains powered kWeld battery spot welder case.



Cederb

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Summary

A fully printed case for the kWeld battery spot welder with the kCap, kSupply, and the hstns-pro01 power supply.

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The **kWeld** from Keenlab is an excellent battery spot welder, especially as a desktop unit with the accompanying ultracapacitor bank kCap, the power supply module kSupply, and a compatible server power supply. But as I couldn't find any good printable cases, I designed this one.

The larger parts are designed to be printed with their side towards the build plate and require a printer close to 300mm in Z height (297mm minimum). If your printer and material combination do bridges and overhangs well, it should be possible to print them without support, but I used support when I printed mine.

I used a Noctua NF-F12 industrial PPC 2000 fan and a generic 120mm fan grille, but most any 120mm fan, including the Scythe Slip Stream SY1225SL12SH which Keenlab recommends should work.

I used the HP HSTNS-PRO1 power supply

Bill of Materials

- 25pcs of M3 heat-set inserts, any that fit a 4mm hole and are 5-6mm long will work. I designed it for the ones from [3DVerkstan](#), but either the [Ruthex](#) or the ones from [CNC Kitchen](#) should work equally well.
- Screws:
 - 9pcs of countersunk/flat head M3x10mm screws to close the case.
 - 12pcs of button or socket head M3x10mm to mount the kWeld and kCap PCBs and to fix the fan shroud to the top case.
 - 4 pcs of M3x30mm screws and 4 pcs of M3 washers for the fan and fan grille.

Material selection

Any rigid filament should be fine to print this in, as long as your environment isn't too hot. My recommendation is anything with a similar temperature tolerance to PETG or higher.

Model files



kweld-case-top.stl

☐ Print with the flat short side towards the print bed.



kweld-case-bottom.stl

☐ Print with the flat short side towards the print bed.



kweld-case-fanshroud.stl

☐ print with the round side towards the bed.

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