



Heltec V4 18650 compact case (updated)



nonsintetic

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Summary

a compact case with an 18650 battery and gps for the Heltec Lora32 V4.
Now with less stupid buttons.

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UPDATE: New version is up that includes less fiddly buttons, they print flat now and should be easier to glue into place. I made them a bit bigger too. Old version files included in /old.

I wanted a portable case for my new Heltec Lora32 V4 board. I like to cram as much stuff inside a small case as possible. This one supports their GPS board, an 18650 cell connected directly to the port on the board. There's also a magnet depression where you can glue on some thin magnets.

I didn't include an on/off switch since you can hold down the user button to soft-shutdown the node. A power button would need to be on for charging and that just seems janky to me. If you want an on/off button there's a sketch for it in the Fusion360 file, the extrude for the hole is

disabled for the main export, you can turn it back on and adjust the hole to your liking.

No hardware is required, just a dab of superglue to stick the buttons onto the case.

Print the piece with the buttons with no supports and the bridge vertical, use maximum cooling fan speed and slow print speed to keep it from warping, this is by far the trickiest part of the build to print. I believe in you!

ATTENTION:

- **Do not push like Hercules when sliding the board in.** You will break the buttons. Look through the USB hole to see what's holding up, might require some filing to get everything to pass depending on your print quality.
- Look at the images to see how to hold the buttons so you can glue and slide them into place with no tools.

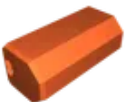
BOM:

- Heltec V4 board
- 18650 maybe with a protection board (you decide your level of safety)
- SMA pigtail
- (optional) their GPS module board (sticks to the side of the case in a recess)
- maybe a spot of glue if the cap isn't tight enough for your liking

Fusion360 source files included. They're messy, you have been warned.

Model files

 **V.1 (old)** 4 files

 **main-body.3mf**
☐ print it with the usb hole on the build plate



endcap.3mf

☐ print it with the flat side on the build plate



buttons.3mf

☐ print them with the bridge vertical, like a suitcase handle, no supports



heltecv4-case.f3z

☐ Fusion360 source



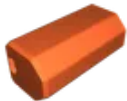
buttons.3mf

☐ print it with the buttons facing up (there is an overhang, that's normal)



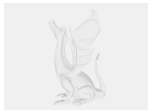
cap.3mf

☐ print it with the flat side on the build plate



main-body.3mf

☐ print it with the usb hole on the build plate



heltecv4-case-v2.f3z

☐ Fusion360 source file

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