



RAK19007 Rugged WisBlock Enclosure



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Summary

RAK19007 Rugged WisBlock Enclosure - A rugged outdoor enclosure for the RAK19007 WisBlock base board.

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RWE (Rugged WisBlock Enclosure) is a remix of the open-source ruggedized T-Beam enclosure, now for the RAK19007 WisBlock base board with RAK4631 (LoRa) and RAK12500/1910 (GNSS/GPS) modules.

This induces a couple important build and electrical component changes which include:

- RAK19007 WisBlock Base
- RAK4631 WisBlock Core
- RAK12500 WisBlock GNSS Module (if GPS desired)
- RAK1921 OLED Display (if screen desired)
 - Serial node access knowledge would be recommended if you are choosing to go without a screen.
- SMA Female to IPX Pigtail - 10~ish cm
- 1x- 12mm LATCHING stainless steel waterproof push button
 - This time you will wire in series with the battery positive for physical power disconnect.

- Also, JST battery receptacle on the board will need desoldered and wires with the XT-30 and switch in series soldered onto the pads. Please be very careful, these pads are close together and sloppy soldering could result in a short circuit. It was taller than I wanted it, and I wanted my case to be as slim as possible. I will hopefully release a much thicker front cover in the future for those who do not want to do this and utilize the JST instead.
- 1x- Waterproof panel mount USB-C
- 1x- USB-C male breakout

WARNING

THIS BUILD IS NOT FOR BEGINNERS OR THE FAINT OF HEART. YOU MUST BE PROFICIENT WITH A SOLDERING IRON. I HAVE PROVIDED LITTLE BUILD GUIDENCE, YOU MUST KNOW WHAT YOU ARE DOING. IMPROPER CONSTRUCTION COULD RESULT IN DAMAGE TO YOUR WISBLOCK, FIRE, OR INJURY TO YOURSELF.

I hope to provide a more detailed build guide in the future, but I wanted to get the open-source project out into world. In hopes of getting folks building and contributing to the project if they are interested.

Lastly, I will list one full build for sale on my Etsy. I will also list case prints or additional full builds if demand exists. Let me know if this interests you via comments or DMs and I am happy to exercise accommodations.

https://www.etsy.com/shop/Print3DbyKorbyn?ref=profile_header

This remix is based on



K-TAC Rugged T-Beam Enclosure 1

by Canine Defense Technologies

Model files



Front Screen

4 files



oled-frame.3mf



oled-frame-no-threaded-inserts.3mf



front-plate.3mf



plexiglass-or-acrylic-hand-cut-template.3mf



Front Cover

4 files



front-cover-screen-knurl.3mf



front-cover-no-screen-knurl.3mf



front-cover-screen.3mf

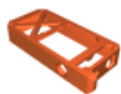


front-cover-no-screen.3mf



Center Frame

2 files



center-frame-knurl.stl

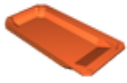


center-frame.3mf

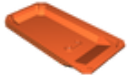


Back Cover

6 files



back-cover-knurl-no-accessory-screws.stl



back-cover-knurl.stl



back-cover-slim-knurl.3mf



back-cover-no-accessory-screws.3mf



back-cover.3mf



back-cover-slim.3mf

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