

ESP32 & SEN6x Enclosure

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VIEW IN BROWSER

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Summary

Case for SEN6x sensors and a ESP32 Devkit v1

3.18 hrs	1 pcs	0.20 mm	0.40 mm	PLA	50 g	Prusa CORE One / +

Hobby & Makers > Electronics

Tags: case enclosure esp32 airquality esphome voc sensirion vocsensor airqualitymonitor sen66 devkitv1 sen6x sen65 devkit1 sen63c sen69c sen68 sen62

ESP32 & SEN65 Enclosure (Modular Case)

A very simple and functional case for the **Sensirion SEN6x** series (specifically tested with the **SEN65**), designed using the original manufacturer retainer and foam models:

- SEN6x Example Retainer (.STEP)
- SEN6x Example Retainer Sealing Foam (.STEP)

Design Features

- **Isolated Chambers:** The front chamber housing the SEN65 is physically separated from the rear compartment to prevent thermal interference and measurement skewing from the microcontroller.
- **Electronics:** Designed for an **Elegoo ESP32 Devkit v1** sitting in the rear section.
- **Status Indicator:** Features a simple cutout window to route and connect an external status LED for air quality visualization.

Included Files

- .sc: SolidCraft source files (for future refinements and modifications).
- .step: Neutral CAD files for interoperability with FreeCAD and other tools.
- .3mf / .bgcode: Prepared slicer project and print files.

Material & Printing Notes

Printed in **PLA**, which has proven completely sufficient and stable for this setup.

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Model files



casing.3mf



casing.step

Print files



casing_04n_02mm_pla_coreone_3h11m.bgcode

PLA 0.40 mm 0.20 mm 3.18 hrs 50 g Prusa CORE One / +

Using Buddy3d PLA

Other files



casing.zip

Solidcraft Project File

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