



## Generic ESP and Sensor Housing. 100% Rainproof. Maintains airflow.



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## Summary

Generic design. Fits any ESP and any sensor inside and maintains 100% rain proofness while preserving maximum airflow.

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Tags: [sensor](#) [wemos](#) [esp8266](#) [esp32](#) [antenna](#) [co2](#)  
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After I already lost two ESP's and sensors due to insufficient housing in bad weather -they drowned- I finally decided to get rid of this problem once and for all.

This housing is rainproof, super versatile and open on it's very top and bottom so it has a chimney effect and prevents any air to get trapped inside of it which could potentially heat up due to the sun shining on it which could therefore influence the sensor reading badly. Due to this chimney effect the sensor is always ensnared by fresh air.

It still provides a rapid and secure mounting of the sensor in mid air without screws or glue while shielding the electronic 100% from any water in any form. (tested several times with real rain).

Therefore the sensor reading won't be influenced by as already stated trapped air or a heated up/radiating wall like it could be when mounted traditionally to a wall.

This thing is also able to house the ESP's external antenna (if any) inside the pole.

Has two openings on the bottom of the pole so you can route the power cable down the pole on the inside and exit on which ever side you prefer for aesthetic reasons as well.

It features on the inside:

Four Slots for all kinds of ESPs, breadboards and sensors.

They are intended to directly insert an esp board with the flat end (the antenna) into the slot. It's designed with the thickness of those esp boards and typical thickness of varios sensor boards or breadboards in mind so you are able to directly stick them in and use just a bunch of wires between the two boards. This is also very beneficial in terms of the produced heat by the ESP itself which could potentially reach the sensor on custom designed PCBs where the spacing isn't sufficient.

The whole thing is designed to fit on the handle of [this clamp](#) or anything that has the same diameter as the handle of this clamp. It has two holes on the very bottom if you want to secure (use screws) it even more but it should fit snugly on the clamp handle.

Printing:

I recommend using at least 3 walls and something about 15-20% infill. I used 15% Gyroid.

It's designed to be printed upside down without supports.

Fits even the smallest printers. Total height below 180mm / 7.09".

Enjoy!

# Model files



sensorplatform.3mf

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