



Prusa XL enclosure SwitchBot smart hygrometer thermometer upgrade



trevordj

[VIEW IN BROWSER](#)

updated 26. 7. 2024 | published 26. 7. 2024

Summary

An upgrade to the stock Prusa XL enclosure hygrometer thermometer to a more accurate one

[3D Printers](#) > [Prusa Parts & Upgrades](#)

I use the SwitchBot smart hygrometer and thermometer in all of my filament dryers because it has a much more accurate hygrometer sensor good from 0-99% RH +/- 2%. This unit also has the ability for remote monitoring with either bluetooth or using their hub which I find helpful. I figured an upgrade to the one that came with the XL enclosure would be in order since I have determined I like this in my filament dryer. I also have designed one for the regular Prusa enclosure.

Materials:

https://www.amazon.com/gp/product/B09GYKJ3WL/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&th=1

<https://www.mcmaster.com/94180A373/>

<https://www.mcmaster.com/94414A741/>

Print Details:

I printed using prusament ASA, no supports needed. Default settings in the enclosure with a bit of heat added to keep the enclosure temp around 40C. Any other material would work just fine as well. I used acetone smoothing on the cover but that's, of course, optional.

Assembly:

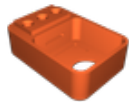
Just print one each of the frame and cover, add the plastic threaded inserts and screw it in to the stock hole on the XL enclosure. The SwitchBot comes with an adhesive backed magnet and there is a molded cutout for this in the design. Its use is optional (I didn't use it) as the hygrometer has a nice friction fit and is held captive against the enclosure plexiglass.

Model files

cover.stl



frame.stl



License

This work is licensed under a
Creative Commons (4.0 International License)



Attribution

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✓ | Commercial Use
- ✓ | Free Cultural Works
- ✓ | Meets Open Definition

