3D Printer Monitor for OctoPrint Wemos 1.3 Display

Qrome

VIEW IN BROWSER

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Summary

This is a station box designed for the Wemos D1 Mini and the standard 1.3" 128x64 OLED I2C display.

3D Printers > Accessories

Tags: arduino octoprint wemosd1mini oled ssh1106

This is a station box designed for the Wemos D1 Mini and the standard 1.3" 128x64 OLED I2C display. Get creative with Arduino code or load some of the awesome Wemos applications out there.

You can find the original little brother to this design here: https://www.thingiverse.com/thing:2884823

- UPDATE: Pat126 contributed the double wide and the back plate for one of the bays. Thanks Pat! These are PrinterMonitor_Double.stl and PritnerMonitor_Base.stl -- if you want to do the double station.
  The Wemos D1 mini will slide in and is held in place by the back plate -- no glue required. The OLED display will need to be glued in with a dab of glue on each corner. Code and Project:
  You can monitor your 3D Printer's OctoPrint Server using a Wemos D1 Mini ESP8266 and a 1.3" I2C SSH1106 OLED Display over a wifi connection. The 3D Printing files (STL) are freely available. The source

code link down below. (Note: some have reported that it works out of the box with AstroPrint as well.) Features:
- Displays the print status from OctoPrint Server
- Estimated time remaining
- Time Printing
- Percentage complete
- Progress bar
- Bed and Tool Temperature
- Screen turns off when printer is turned off or disconnected
- Screen turns on when printer is Operational or connected
- Option to display a clock screen instead of sleep mode
- Option to show 24 hour clock mode
- Sample rate is every 60 seconds when not printing
- Sample rate is every 10 seconds when printing
- Fully configurable from the web interface (not required to update Settings.h)
- Supports OTA (loading firmware over WiFi connection on same LAN)
- Basic Athentication to protect your settings
- Supports both SSD1306 and SSH1106 display chip drivers
  Hardware:
- Wemos D1 Mini: https://amzn.to/2ImqD1n
- White 1.3" I2C OLED Display: https://amzn.to/2IP0gRU
  Note: SPI Serial OLED is not supported (only I2C)
  Please note that using the links provided here help to support these types of projects. Thank you for the support. Download Source Code: https://github.com/Qrome/printer-monitor

*NOTE: You must edit the Settings.h file and remove the // on the "// #define DISPLAY_SH1106" to use the 1.3 SSH1106 display in the code. It defaults to support the SSD1306 display.

Detailed Build video by Chris Riley: https://youtu.be/Rm-l1FSuJpI
Video: https://youtu.be/niRv9SCgAPk

Please share your makes.

- I have been asked a few times to share the step files --- sorry there are none. This design was created using Tinkercad so the only artifacts we have to work with are the STL files shared in the download. Enjoy.
  Code from this Pi-hole Monitor project will work in this box as well.

Print instructions Category: Electronics Print Settings

Printer: Maker Select

Rafts: No

Supports: Yes

Resolution: 0.2

Infill: 20%

Notes:

Supports are only required for the bottom part. This is for the USB hole. The top case does not require any supports and can be printed face down and should turn out great.

Model files

printmonitor_double.stl

printmonitor_base_2.stl

13_monitor_case.stl

13_monitor_base.stl

Find source .stl files on Thingiverse.com

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