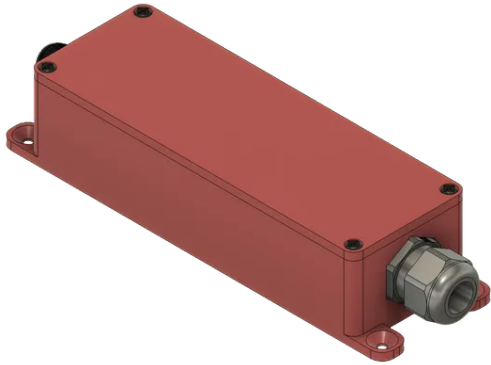




Power Monitor Isolator Box



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[VIEW IN BROWSER](#)

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Summary

Two-compartment enclosure for a JSY-MK-194G meter and Home Power Monitor isolation circuitry.



6.45 hrs



2 pcs



0.30 mm



0.40 mm



PLA



138 g



Prusa
MK3/S/S+

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[energymonitor](#) [jsymk194](#)

Power Monitor Isolator Box

A two-part enclosure for the JSY-MK-194G energy meter and the separate isolation circuit used in my Home Power Monitor project. The case has two internal compartments, mounting points for both boards, cable-gland openings at opposite ends and external mounting tabs. Four M3 screws secure the removable lid into threaded inserts.

The original hardware was assembled on veroboard. The isolation circuit provides isolated serial communication and power between the meter and the Raspberry Pi host.

Files

Print one case and one lid. The assembly STL is a reference model containing purchased components; the editable Fusion archive and STEP assembly are also included. The drawing and assembly video show how the parts fit together.

Assembly

Fit the four lid inserts and the two cable glands. Install each board on its four standoffs in the corresponding compartment, using the M3 screws and nylon nuts shown in the drawing. Route cables through the glands and the internal partition opening, then fit the lid with four M3 screws.

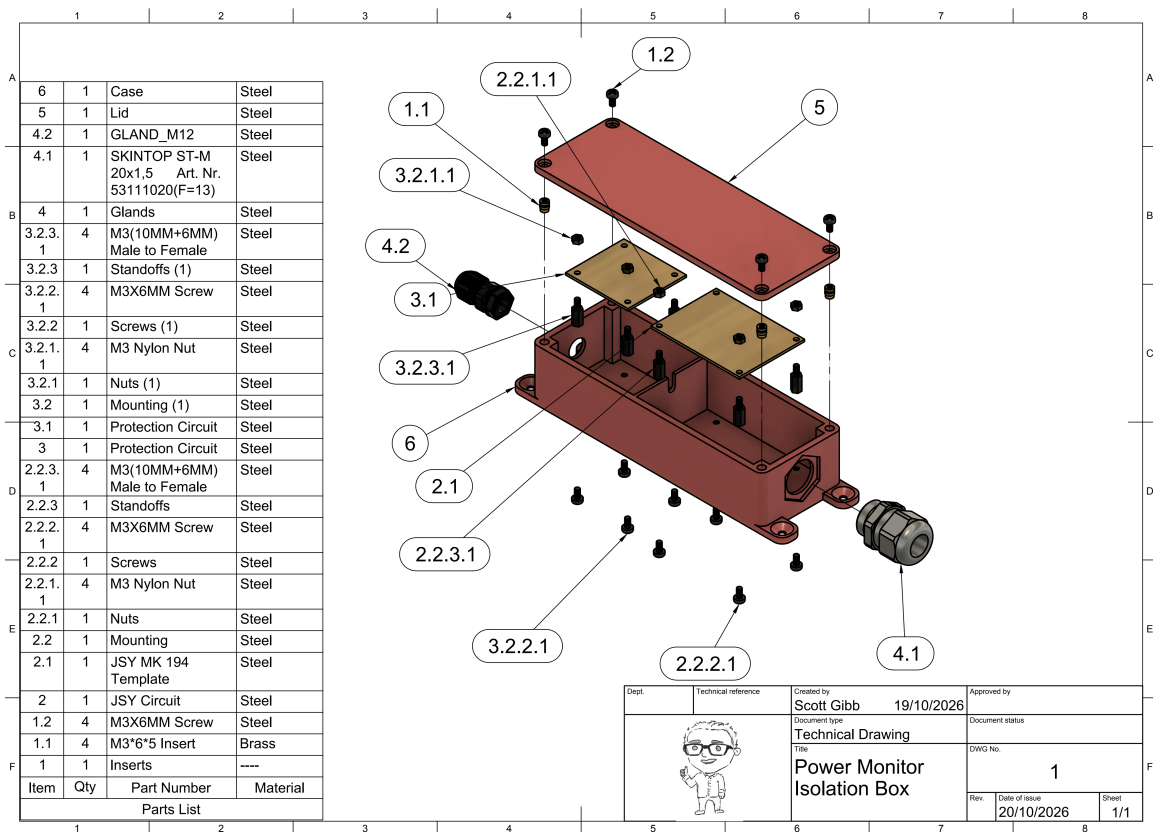
Use the hardware repository for circuit schematics and wiring information. The printed enclosure has no declared electrical or ingress-protection rating.

Project links

- [Home Power Monitor hardware and wiring](#)
- [Home Power Monitor software](#)

Technical drawing

Exploded assembly and parts list. Download the drawing PDF from Other Files.



Exploded view

<https://www.youtube.com/watch?v=g2szmG2Mlfc>

Model files



power-monitor-isolator-box-v12-lid.stl



power-monitor-isolator-box-v12-assembly.step



power-monitor-isolator-box-v12-assembly.stl



power-monitor-isolator-box-v12.f3d



power-monitor-isolator-box-v12-case.stl

Print files



power-monitor-isolator-box-v12-case.gcode

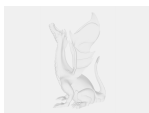
PLA 0.40 mm 0.30 mm 4.94 hrs 104 g Prusa MK3/S/S+



power-monitor-isolator-box-v12-lid.gcode

PLA 0.40 mm 0.30 mm 1.51 hrs 34 g Prusa MK3/S/S+

Other files



power-monitor-isolator-box-v12-drawing.pdf

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