

Flatburn: assembly guide

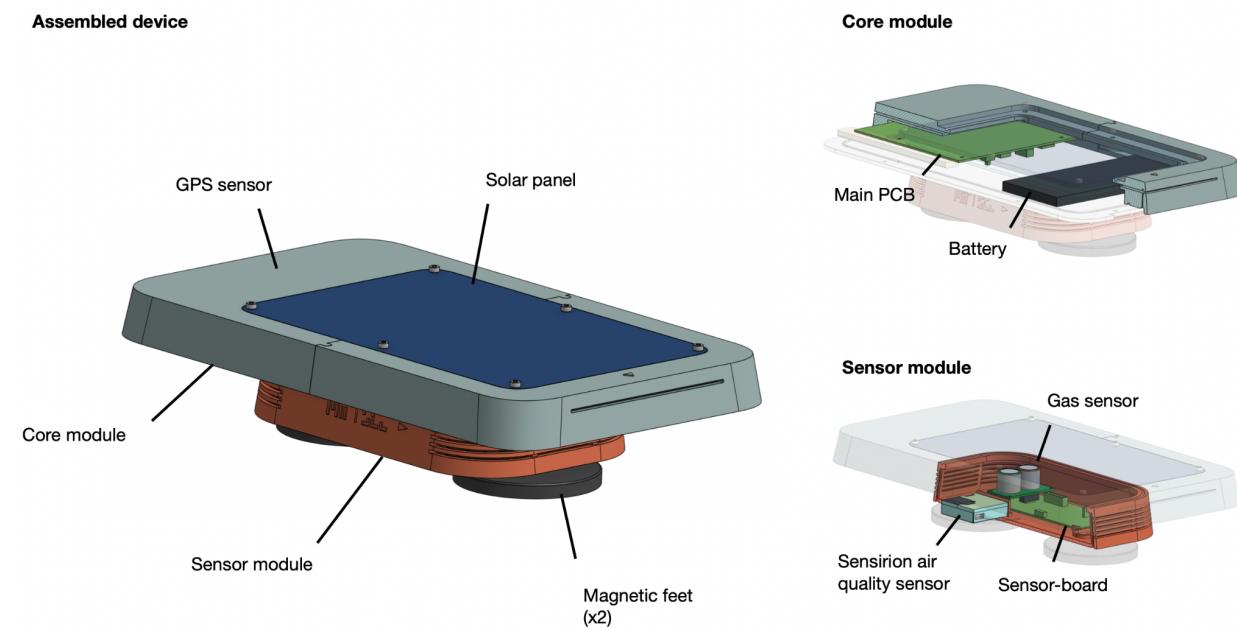
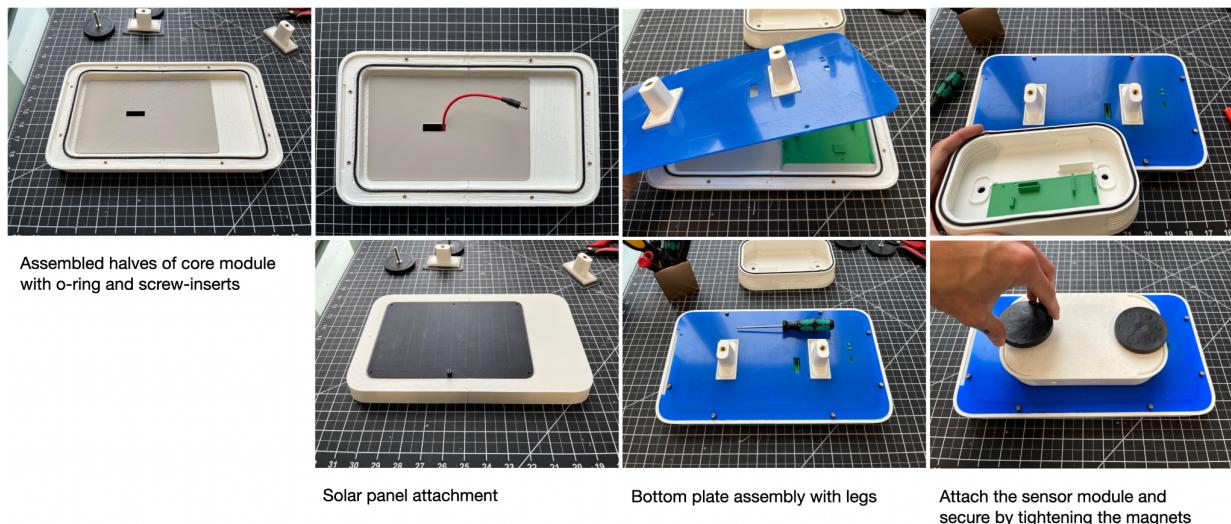


Figure 1: main features of the Flatburn device.

Given: 3D printed and laser-cut parts, fasteners and tools as specified in the [bill of materials](#). See Figure 2 below for an overview of the main assembly steps.

1. Using a soldering iron, add screw inserts to the core module and to the magnet-feet holders; small (M3) and large ($\frac{1}{4}$ ") inserts respectively
2. Slot together two halves of the core module
3. Use super-glue to secure the o-rings in the core module (solar-panel recess and base-plate recess) and to the top of the sensor module
4. Clip 'in-between plate' into core module. Feed solar panel cable through slot.
5. Screw solar panel onto the core module
6. Slide battery into front of the core module
7. Slide the main PCB into the back of the core module; secure with 3D printed clamps.
8. Connect solar panel and battery to the main PCB
9. Clip the magnet-feet holders into the base-plate
10. Feed the sensor-connector-cable through the slot in the base-plate and then secure the plate to the core module
11. Clip the sensor-module PCB and Sensirion sensor into the sensor-module enclosure
12. Finally, use the magnet feet to screw the sensor module onto the core module from below.

Congrats, the device is now ready to deploy on your closest car roof!



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Figure 2: overview of the main assembly steps