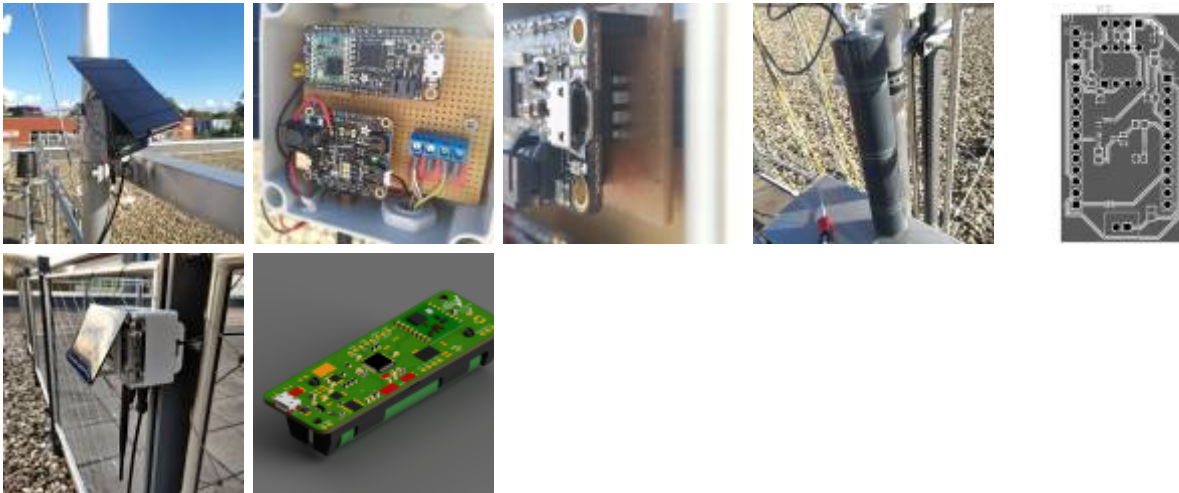


Sceme Lora Node (Prototype)

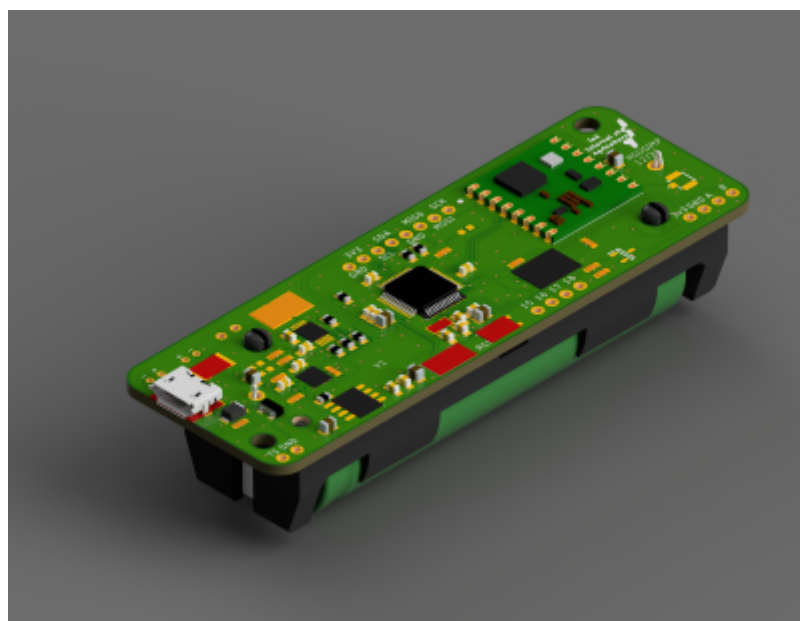
This device can connect to a Sceme Sensor for measuring soil permittivity and temperature at three different depths. The data gets transmitted to an IoT-Stack for saving the data permanently and displaying it nicely in graphs. The data from a test we run on our terrace can be found here: [Grafana Dashboard](#)

The device is powered by solar and an internal battery. It can also monitor the battery. The battery levels get also logged on the dashboard. This prototype also includes a custom-made circuit board.



Sceme Lora Node (Prototype v2)

The second prototype is more sophisticated and implements things that work in a more compact and also cleaner way. It is still based on the RFM95 HopeRF Module on 868 Mhz. It's using a 18650 LiPo battery and also includes a Solar Charger, so a Solar Cell can be hooked up. Furthermore, a coulomb counter observes the power usage so it can be precisely determined if and how much current is used or if the battery is recharged.



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