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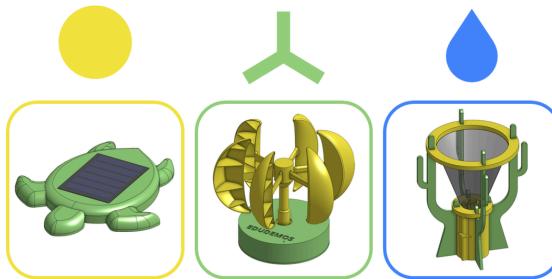
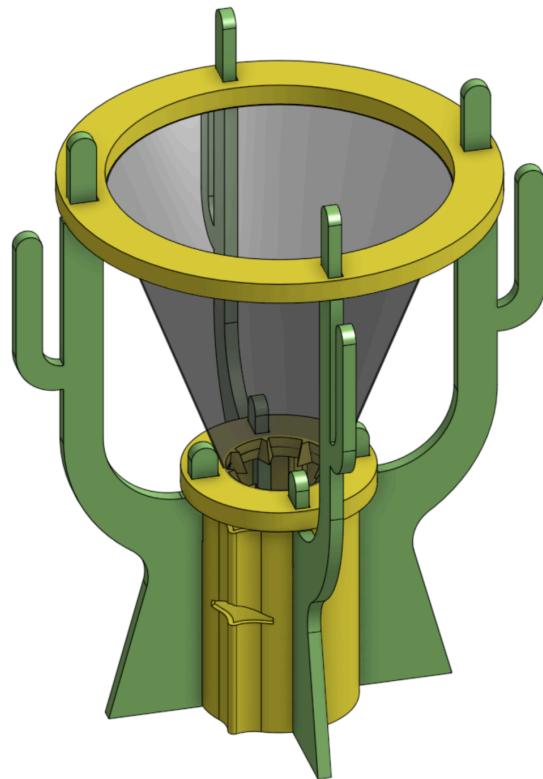
EDUDEMOS

EDUcating through Sustainable **DEMO**nstrators

Assembly Guide

Modular Weather Station

Water Collector Module



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Materials

Electrical Components

- 1x Water Level Sensor (Arduino)
- 3x Jumper Wire F-M

3D-Printer

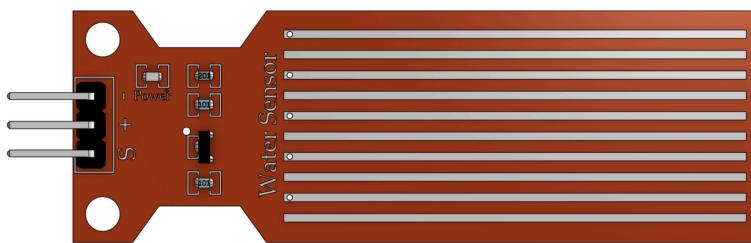
- 4x Cactus
- 1x Collector Cup
- 1x Lower Ring
- 1x Upper Ring
- 1x Cone

Optional

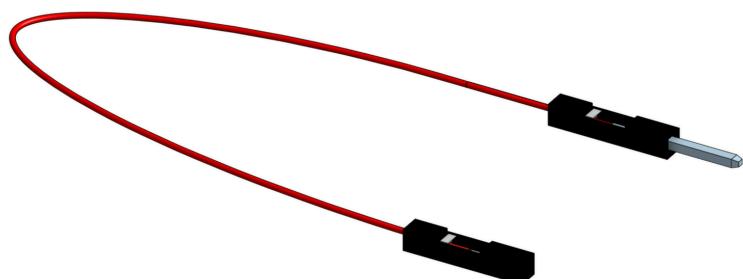
- Metal mesh cone, 30cm*20cm (Instead of the printed cone)

Materials

Electronics



Water Level Sensor
x1

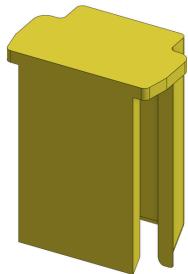


F-M Jumper Wire
x3

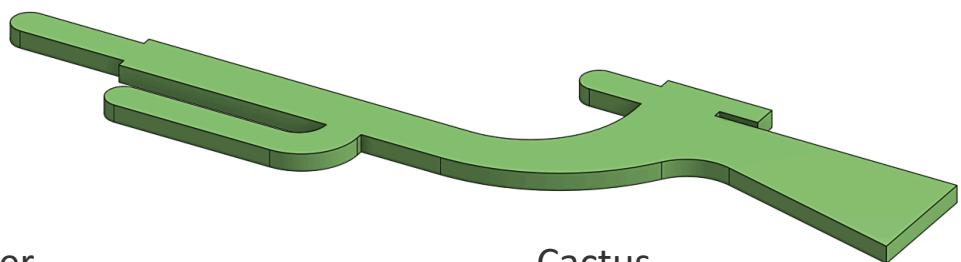
Total **2**
elements

Materials

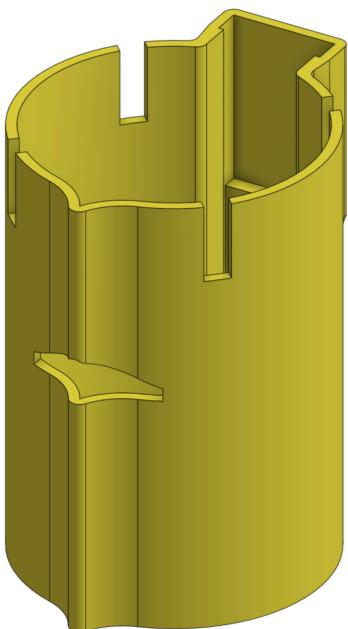
3D Printed Parts



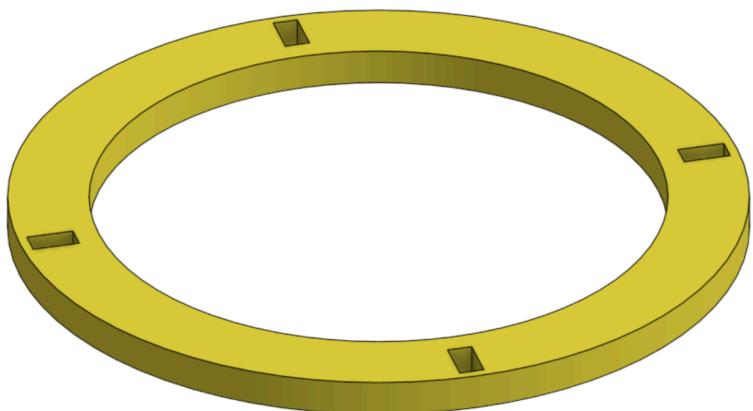
Sensor cover
x1



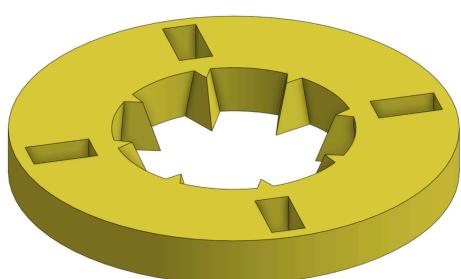
Cactus
x4



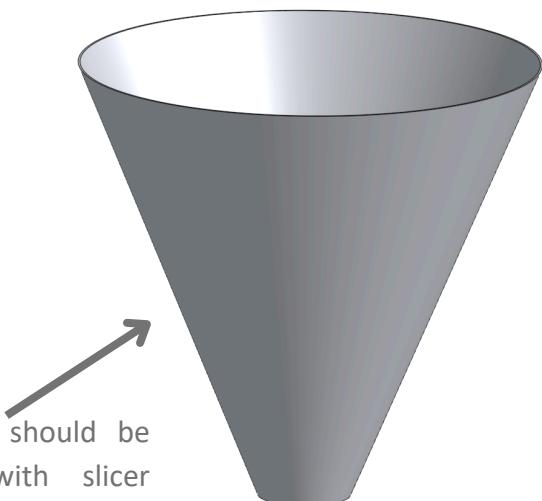
Collector cup
x1



Large Ring
x1



Small Ring
x1



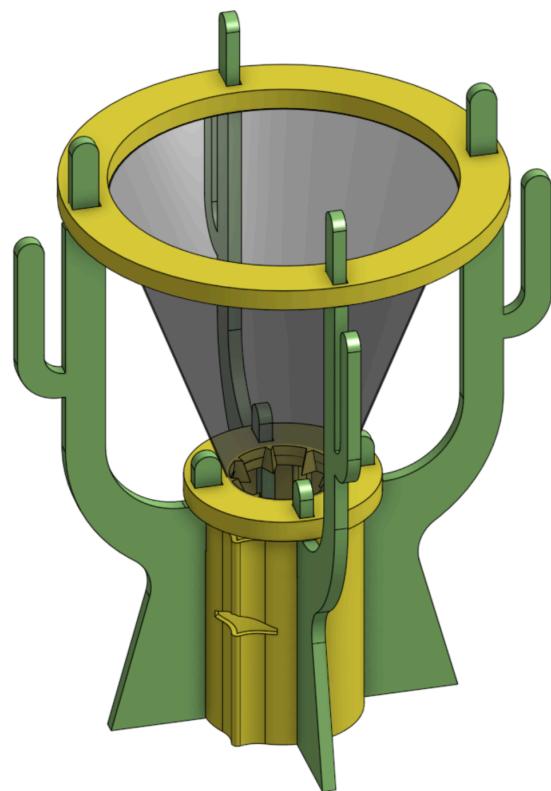
This part should be
printed with slicer
settings set to “fuzzy”
and “spiral”/ “vase”
3D-printed cone
x1

Total 9
elements

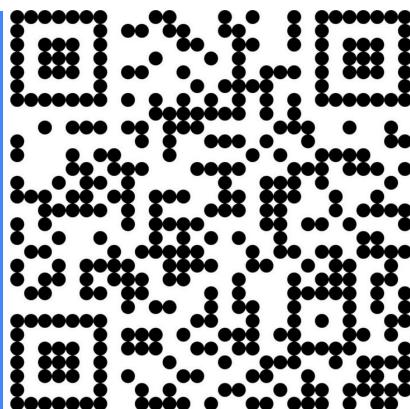
Step By Step

Instructions

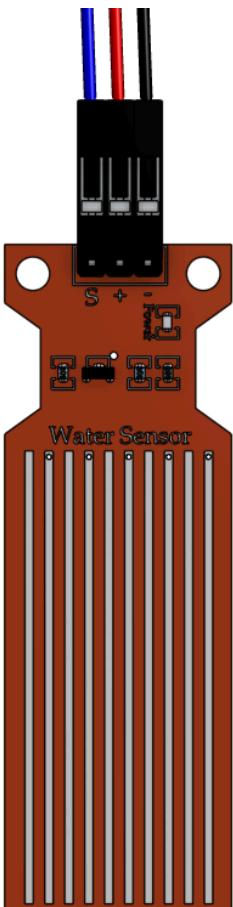
a. Print the parts of the Cactus on any 3D-Printer



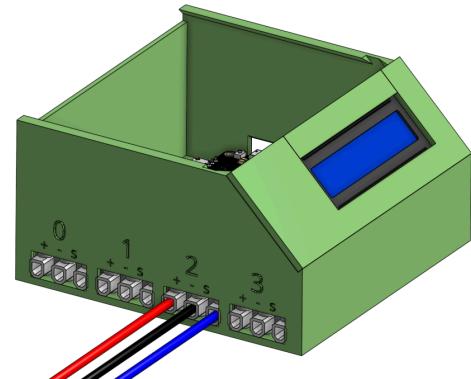
The STL-printfiles
are available on
the EduDemoS
webpage.



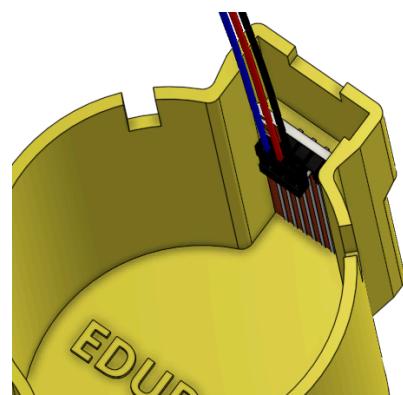
b. Building the Water Collector



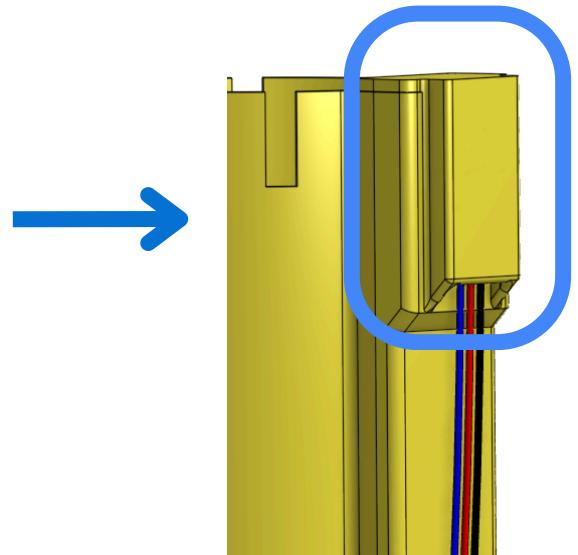
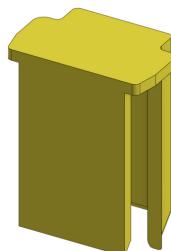
1. Connect 3 F-M Jumper wires to the water level sensor and to the controlbox. Make sure to connect "+" to "+", "-" to "-" and "s" to "s"



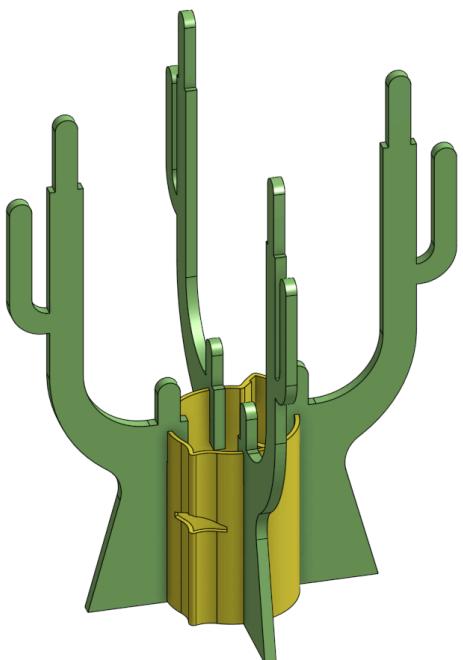
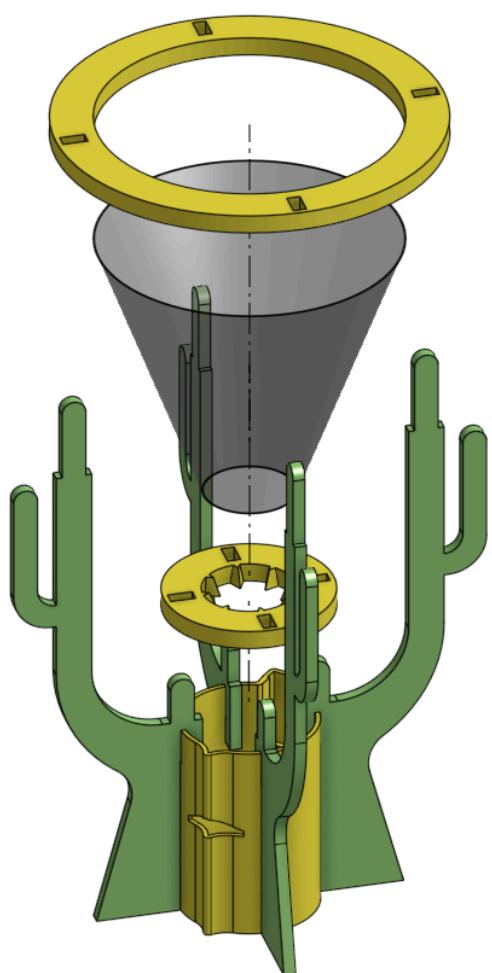
2. Slide the sensor into its holder on the water collector



3. Now enclose the cables and the sensor with the sensor cover



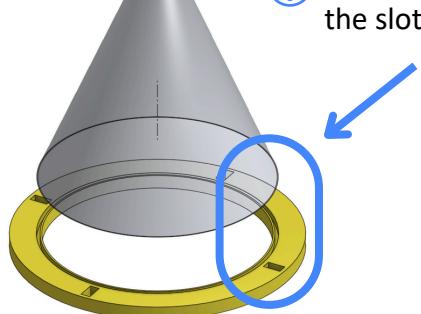
4. Slide the cacti into the corresponding cutouts in the collector cup

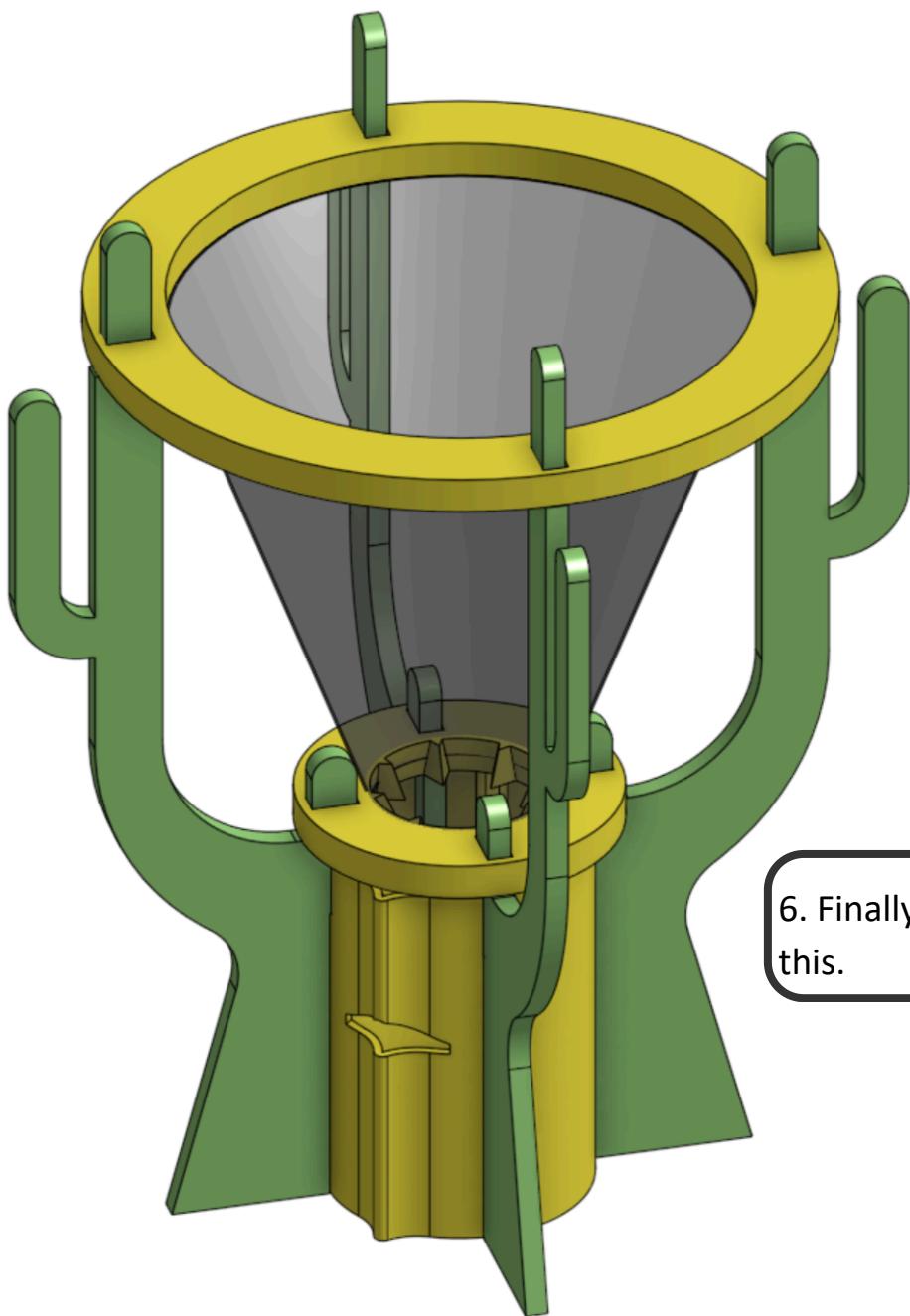


5. Finally:

- Slide the smaller ring into place
- The cone is supposed to sit loosely on the “teeth” of the small ring

 Make sure that the cone slides into the slot of the top ring





Which other modules can you
imagine?

Personalize your own demonstrator,
and share your ideas and feedback
with us at

edudemos@technikmachtspass.org

Attachments

a. Optional metal-mesh cone

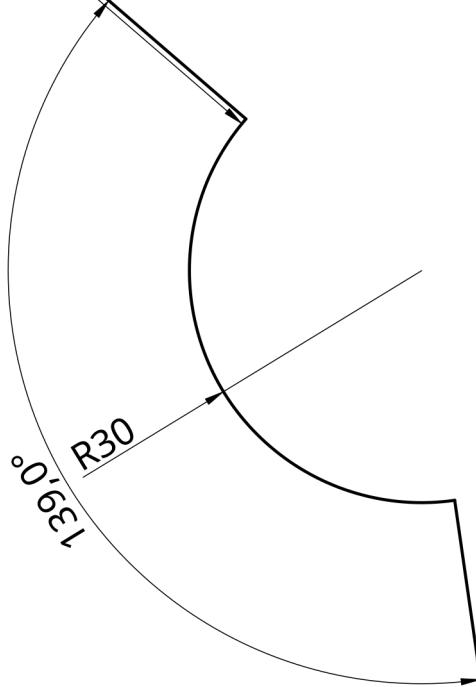
With this template you can make an optional cutout from a metal mesh (or similar) and make your own cone instead of printing one.

Roll it up and connect the ends using wire, glue or a stapler.

Important: Make sure to print this page borderless!

Why do this?

A metal mesh offers more surface area for water to deposit and is better at absorbing heat. This will increase the amount of water collected by this module.



Use gloves when handling metal mesh. It can have sharp edges!

Licensing

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All Circuits were created with [Fritzing](#).

Some images are based on moduls from [GrabCAD Library](#).



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Get In Touch With Us



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