



ESP32 DevKit V4 + LCD Outdoor Housing

B Buzz

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Summary

A small outdoor housing for thermometers or other stuff using a 16x2 LCD an a ESP32 For a sleek design with a separate...

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A small outdoor housing for thermometers or other stuff using a 16x2 LCD an a ESP32

For a sleek design with a separate break out cable box, conencted to the ESP-housing with only one cable.

Have fun with it

How I Designed This

Designed in Solidworks

Outdoor housing for a thermometer, including a one cable connection to a separate cable box.

Designed for 16*2 LCD with I2C-adapter and ESP32 DevKit V4 from AZ Delivery

Connection cable standard RJ45 network cable. Either with PoE or use the 8 wires individually

LCD + ESP32 housing can be printed without supports (only in the hex-nut cutout).

With inserting the inner housing in the outer housing the PCBs and the cable are fixated.

Lock with 2 stainless M4 x 14 and stainless M4 nuts for resistance against rain

Cable Box with clamping bar for 3x DS18B20, 1x USB in, 1x Ethernet, 1x 7mm OD cable

Also use here M4 x 14 and M4 nuts for resistance against rain.

All 3 parts can be printed without support, cover standing upwards on the small face.

All printed in PLA with standard settings.

Works well since 4 weeks and has survived some heavy rain falls

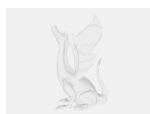
I included the SolidWorks 2017 native data as well as a step-file of the assembly, if want to do any changes.

Cheers,

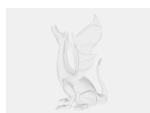
Sebastian

Category: 3D Printer Parts

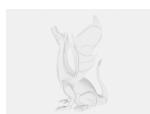
Model files



cablebox_cover.sldprt



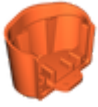
cablebox_housing.sldprt



esp32lcd_housing.sldprt



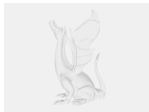
esp32lcd_innerhousing.sldprt



esp32lcd_housing.stl



esp32lcd_innerhousing.stl



cablebox_housing.step



cablebox_cableclamp.step



cablebox_housing.stl



outdoor_housing_step_complete.step



esp32lcd_innerhousing.step



cablebox_cover.step



cablebox_cableclamp.sldprt



esp32lcd_housing.step



cablebox_cableclamp.stl



cablebox_cover.stl

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