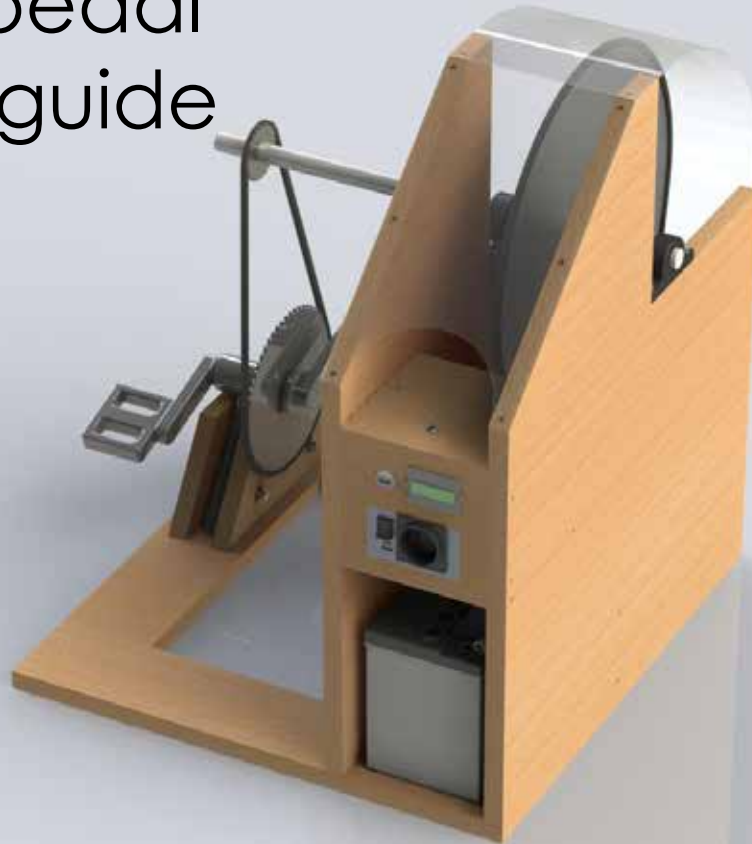


Indiepedal

A DIY guide



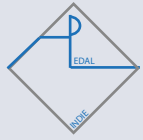
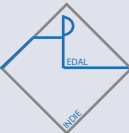


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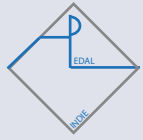


Introduction

Indiepedal - A human powered energy station with the purpose to provide clean and free energy for small devices at home or in rural areas. It is a DIY kit and suitable under any working desk.

In the following pages you will find a DIY guide to build Indiepedal. In this guide we provide the measurements of the parts we used. Be aware that certain measurements have to be changed if you want to use different sized parts for your project.

The prices we give are based on the original price of each part, but also they can be found second hand or for free.



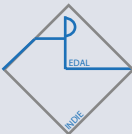
License

Copyright (C) 2016 Kilian Berk Müller , Jonatan Sepp , Michael Schomburg

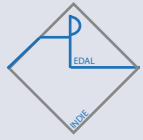
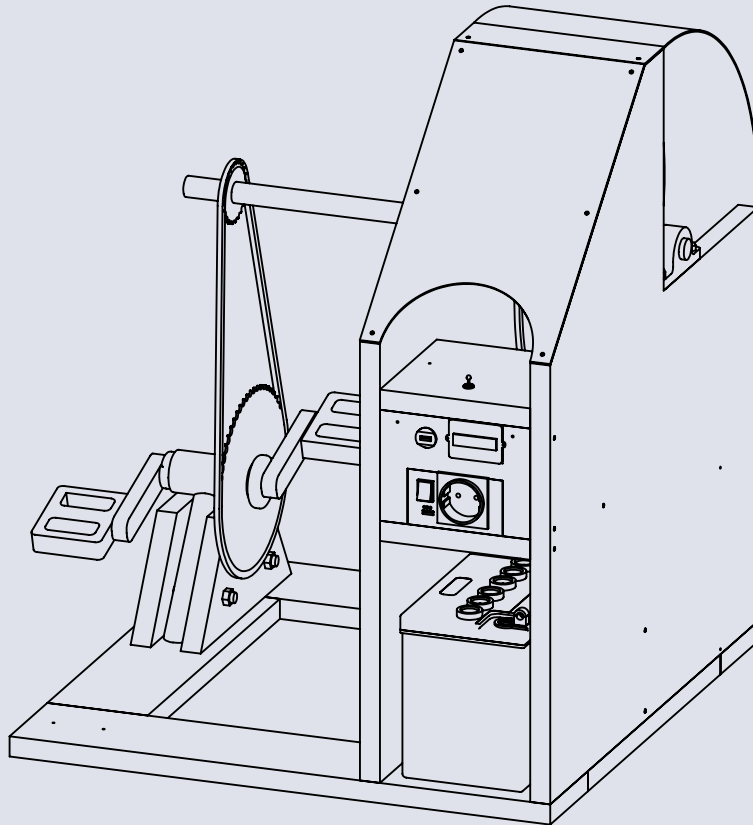
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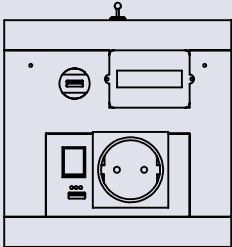
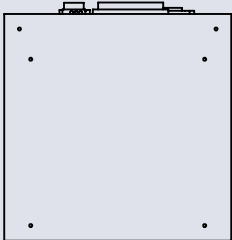
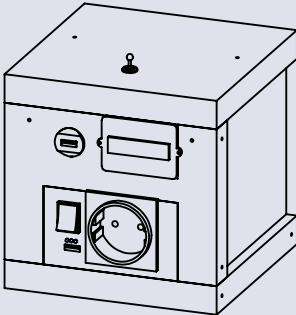
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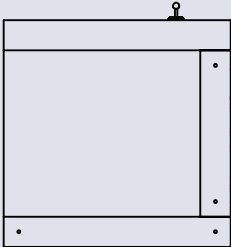
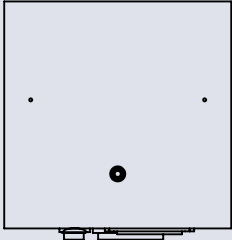
Parts for Indiepedal



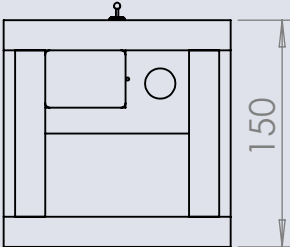
Parts for module box



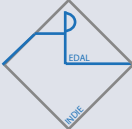
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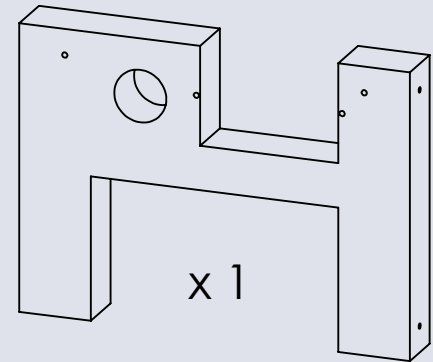
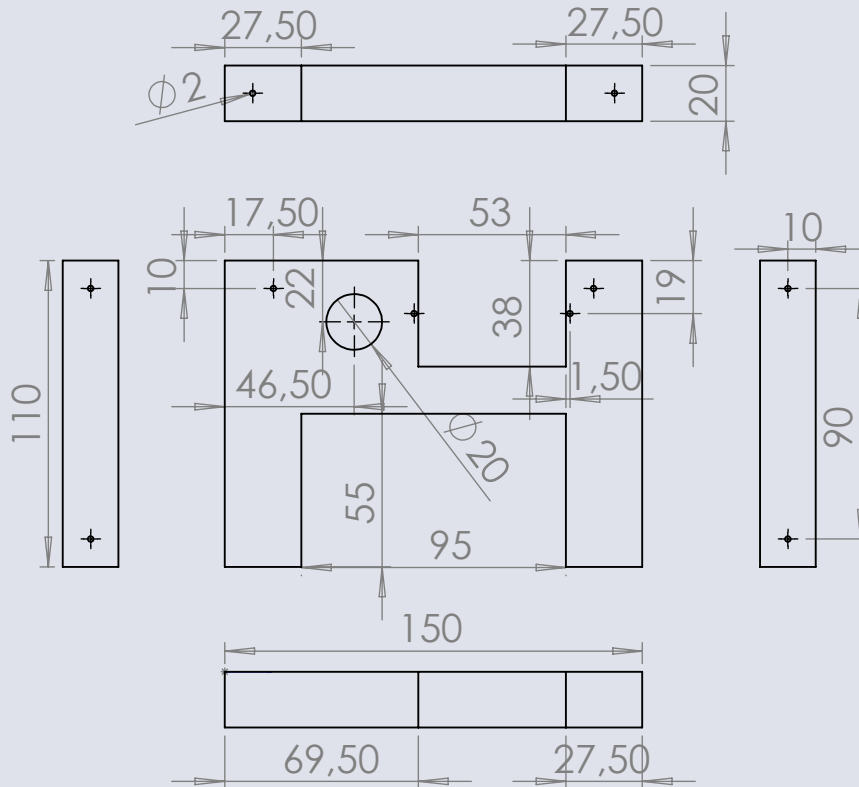
150



150

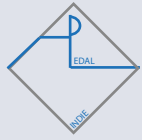


Front plate module box

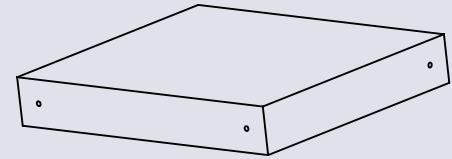
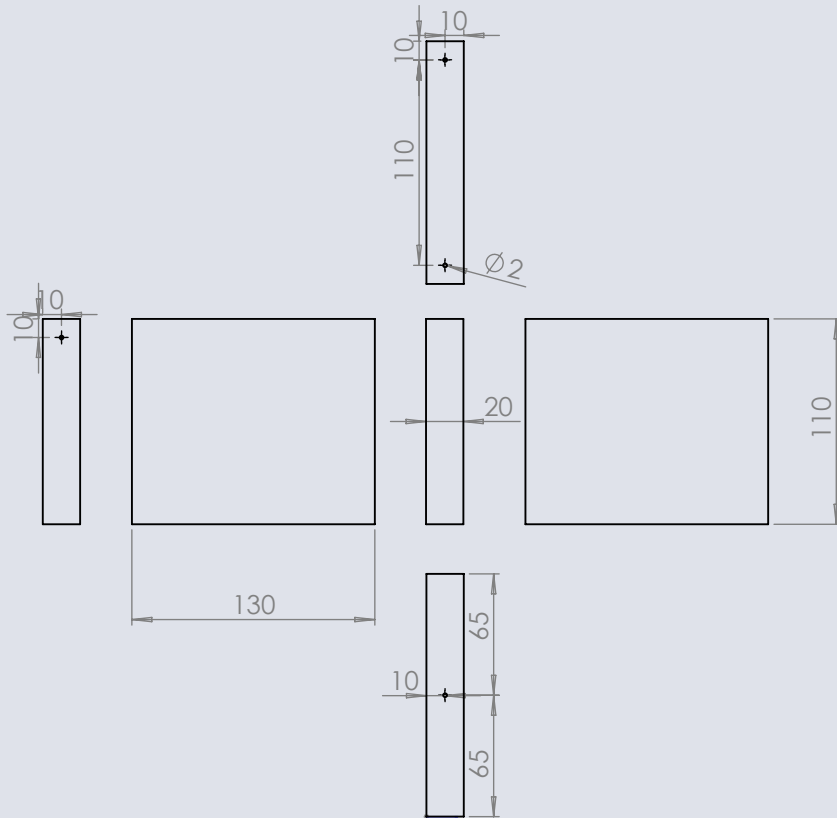


All "plate" parts should be made from 20 mm multiplex. (€ 61,00 / m²)

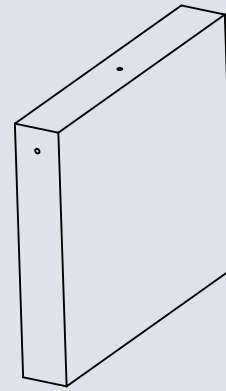
The depth of the holes has to be at least 20 mm in every wooden part.



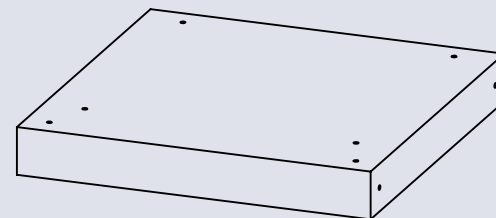
Side plate module box



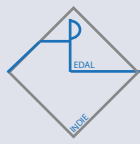
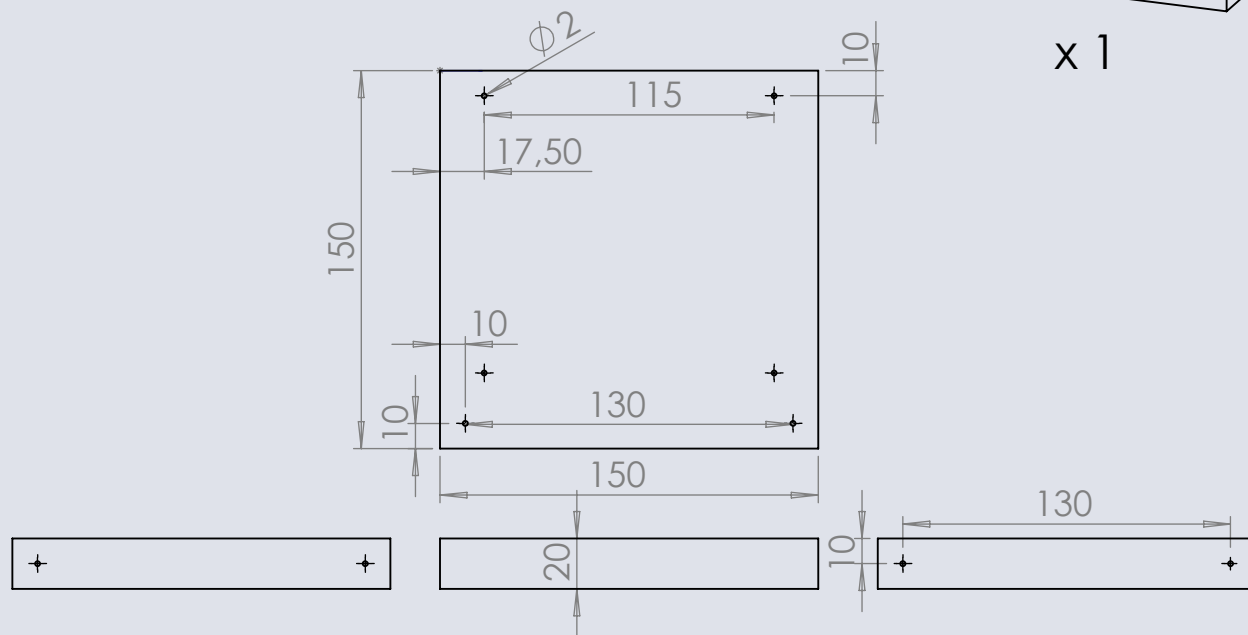
x 2



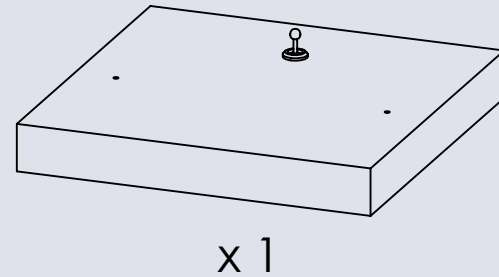
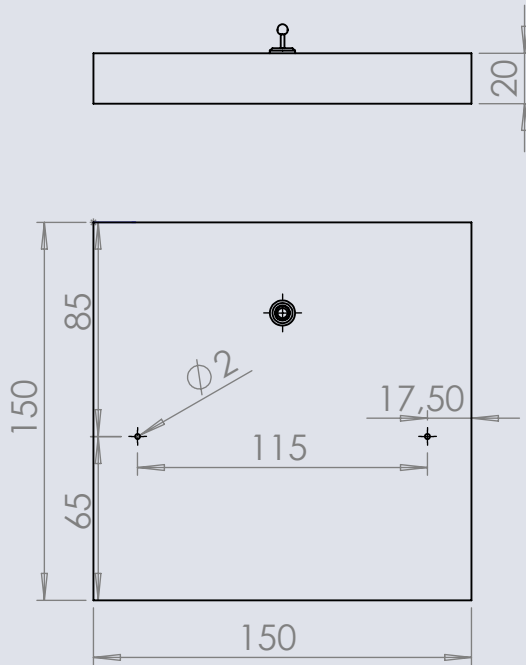
Bottom plate module box



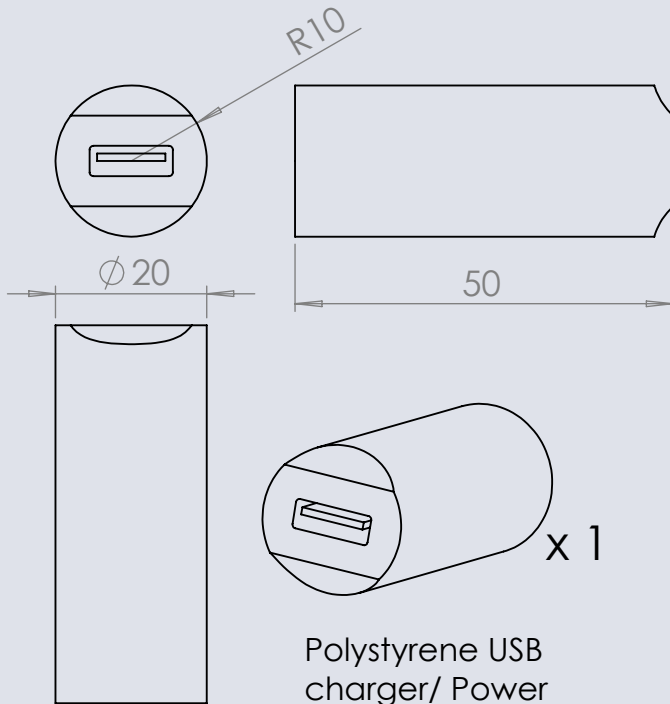
x 1



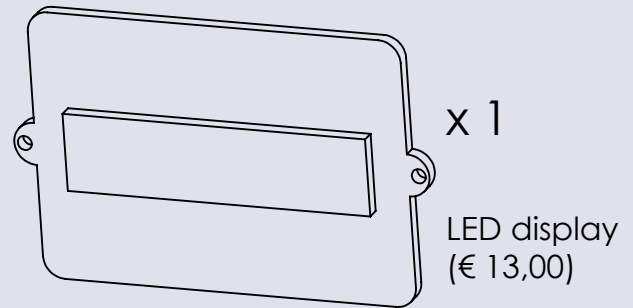
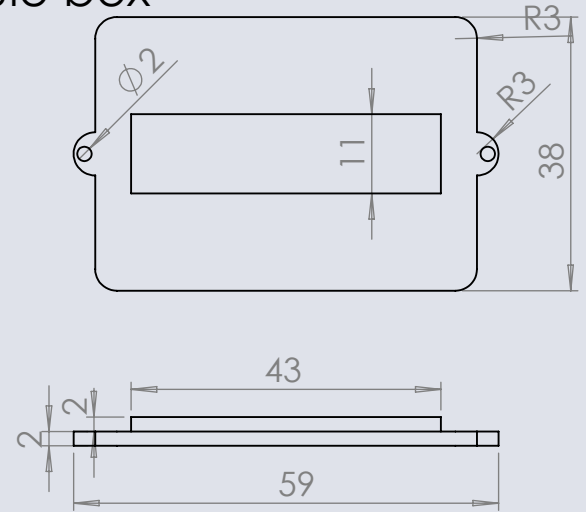
Top plate module box



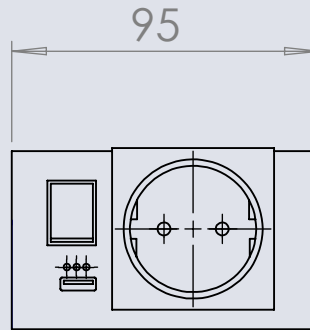
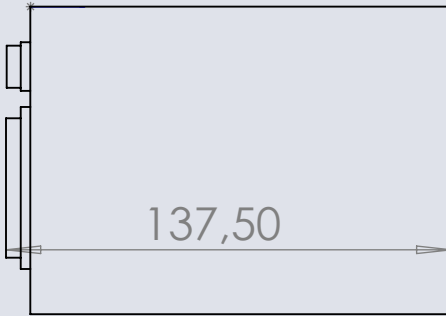
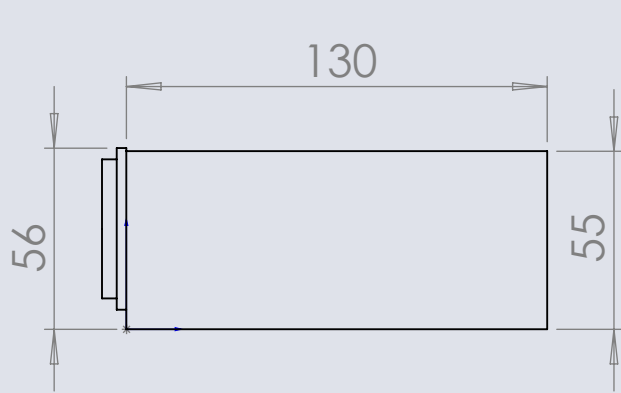
USB charger and display for module box



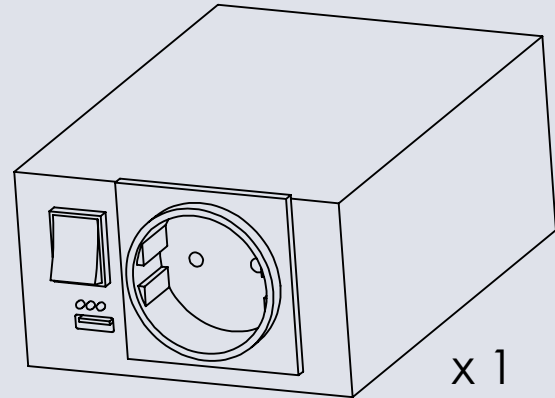
Polystyrene USB
charger/ Power
output 5V (€ 5,99)



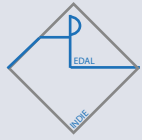
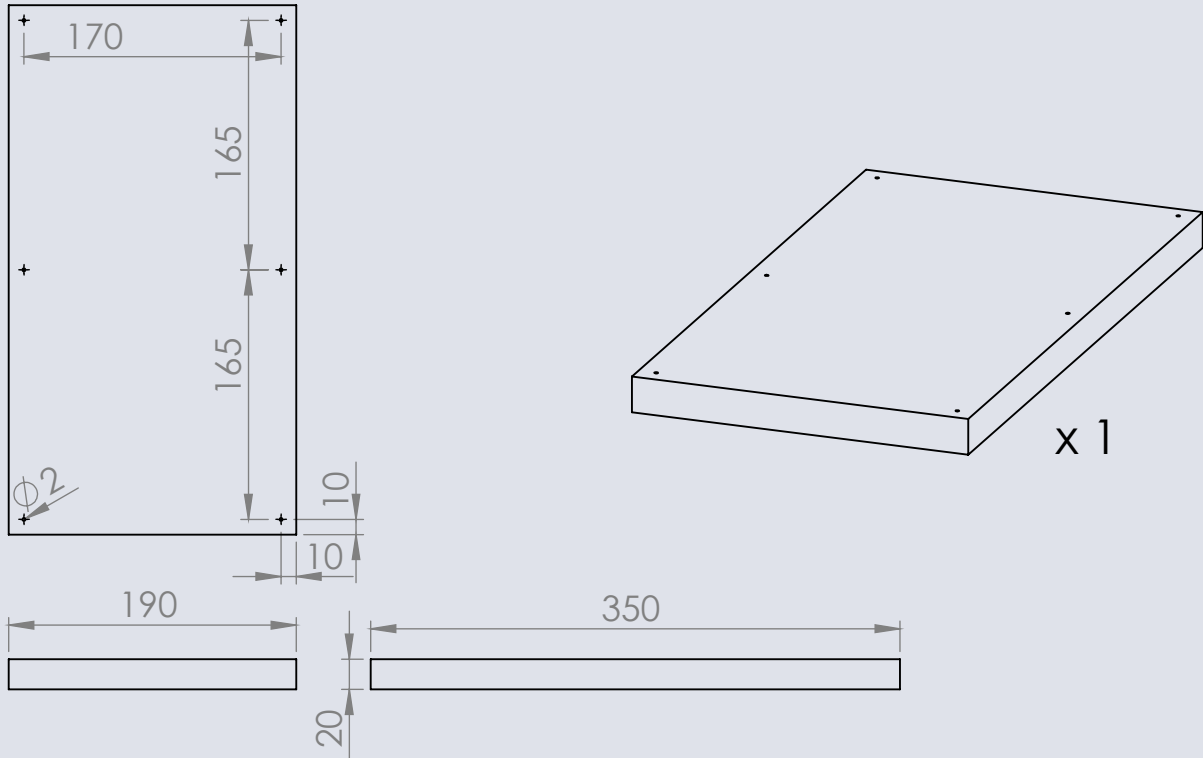
Inverter for module



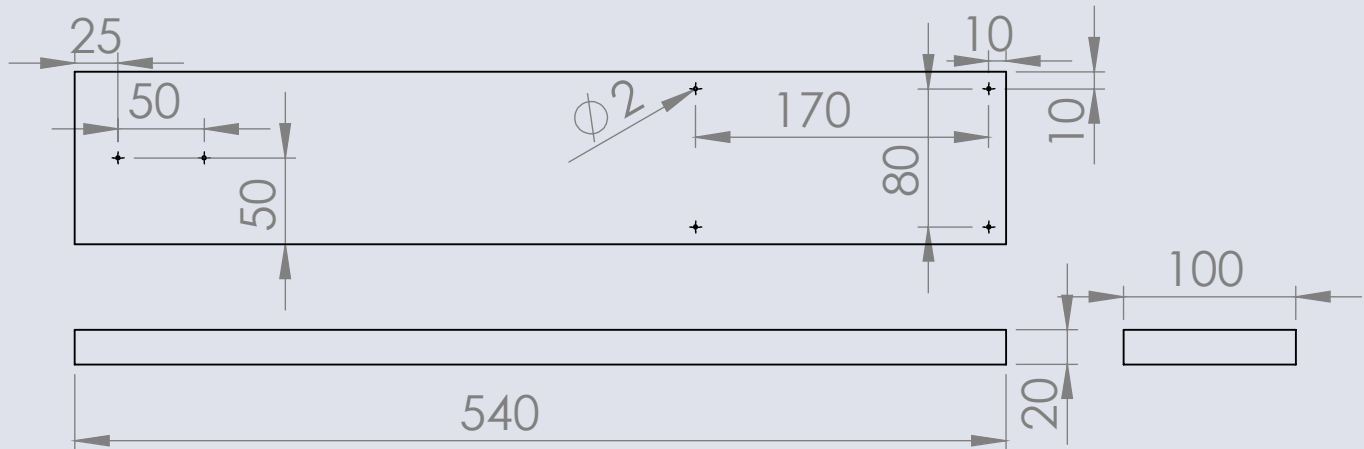
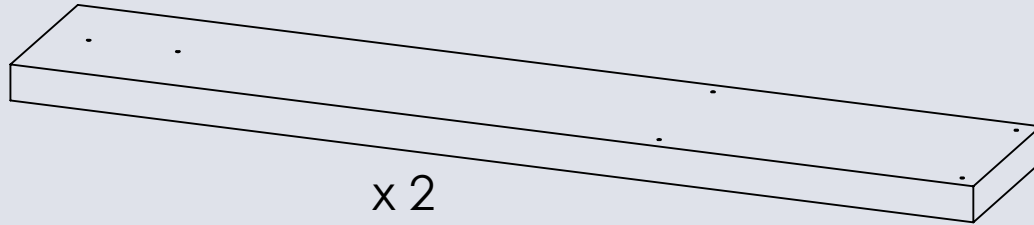
Voltage input – 12V
Power output – 300W
(€ 30,00)



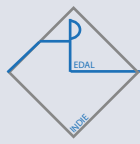
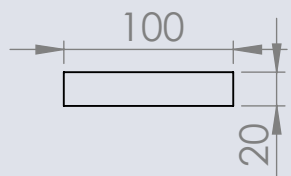
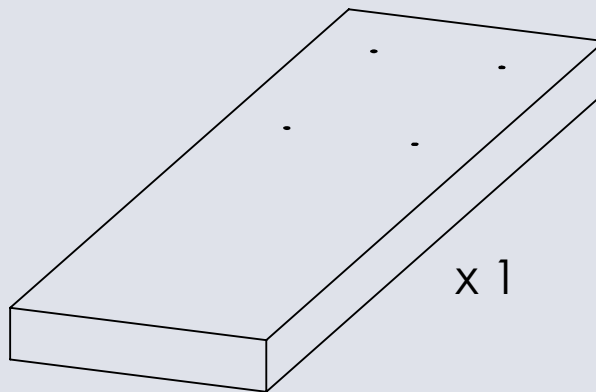
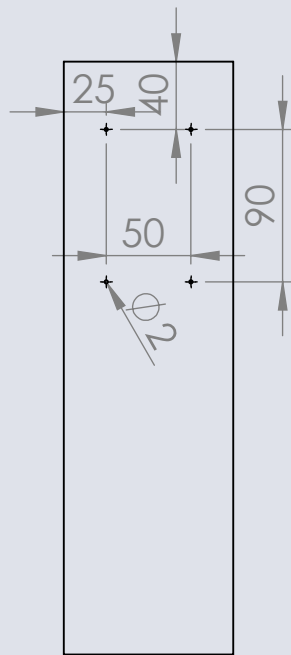
Bottom plate main box

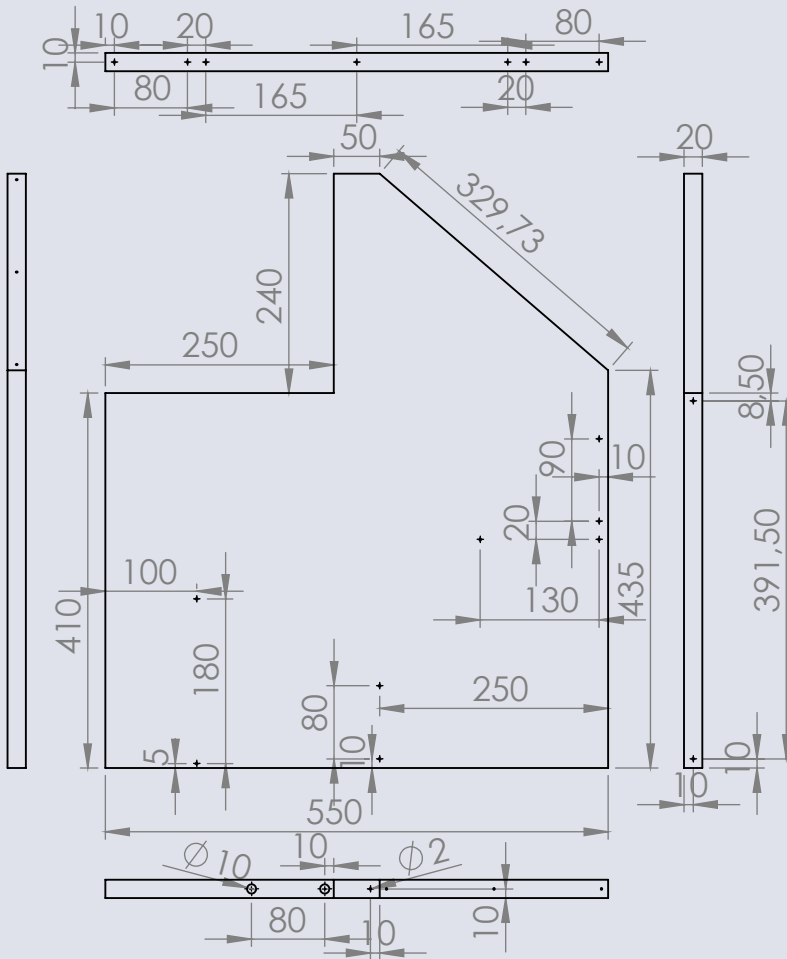


Bottom connection plate

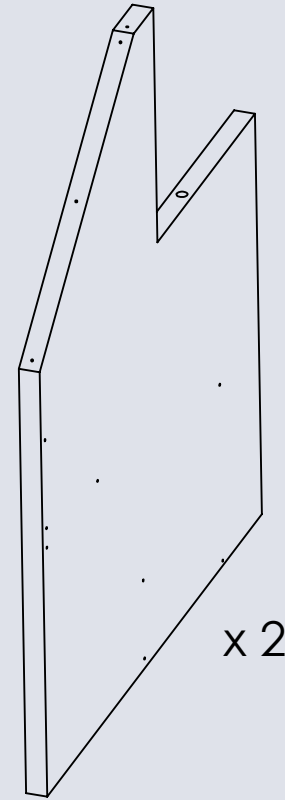


Bottom plate pedals

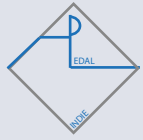
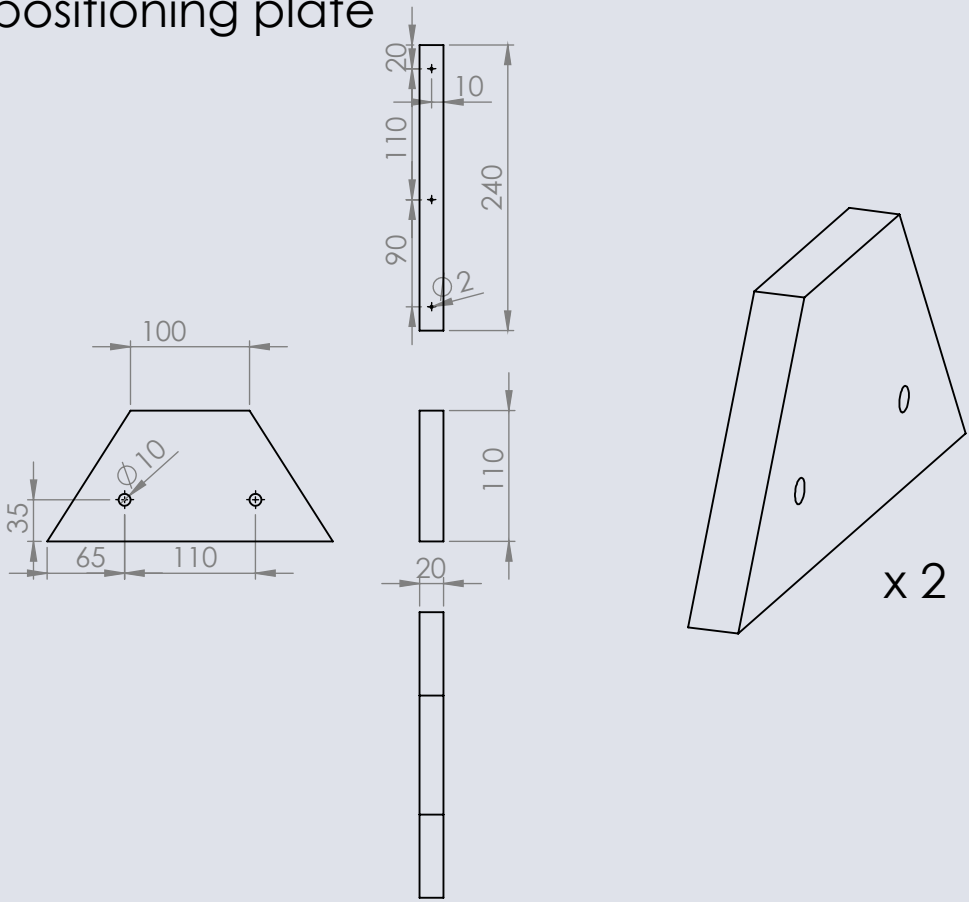




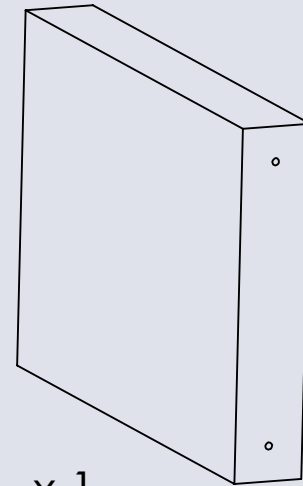
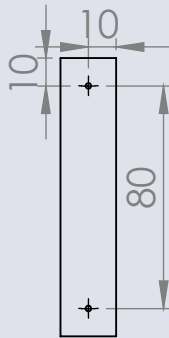
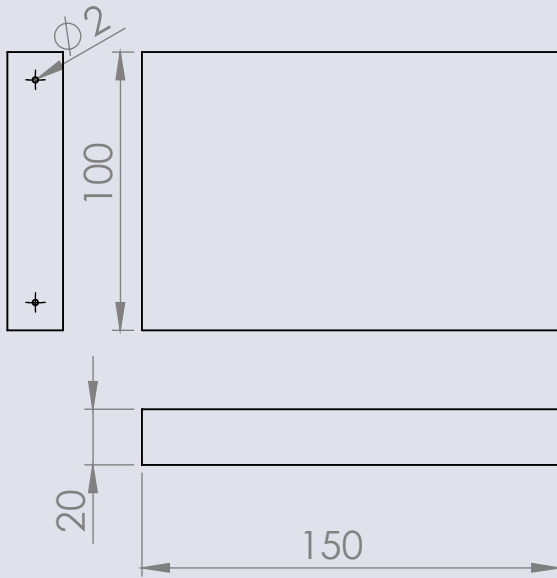
Side plate main box



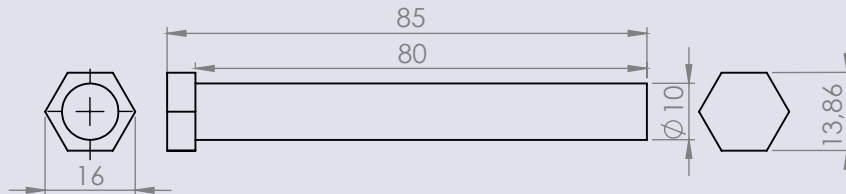
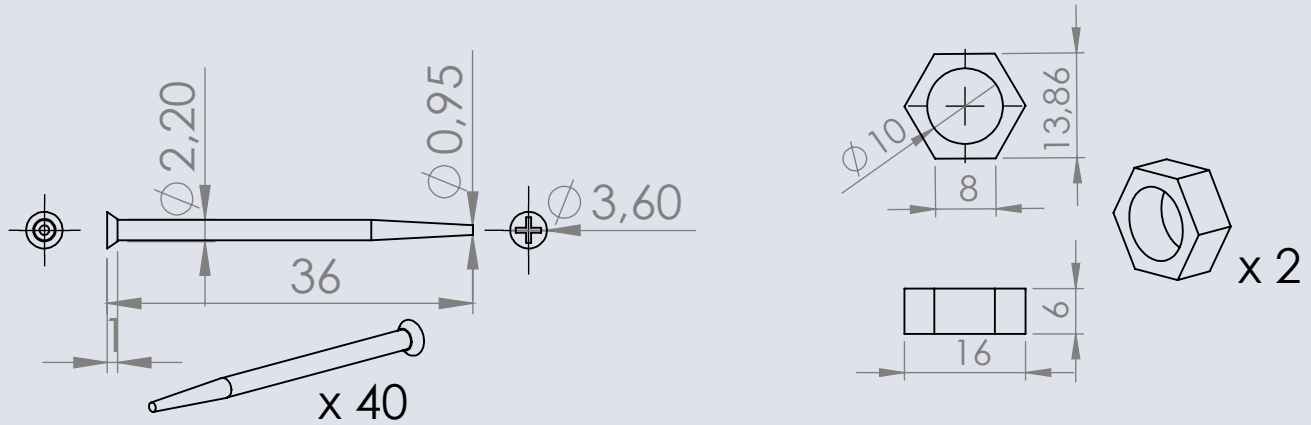
Crank positioning plate



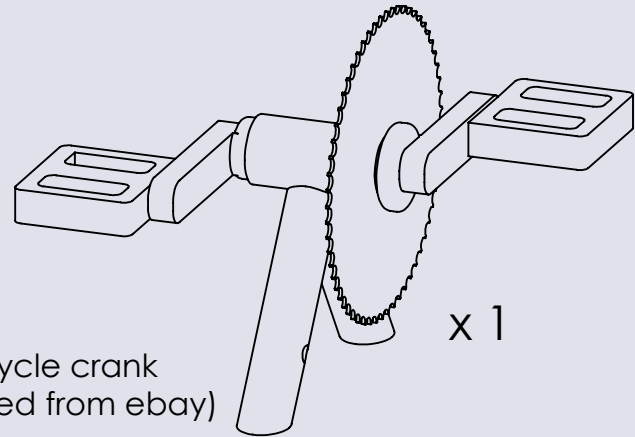
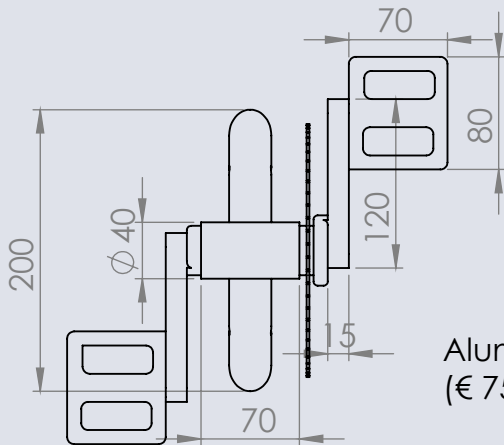
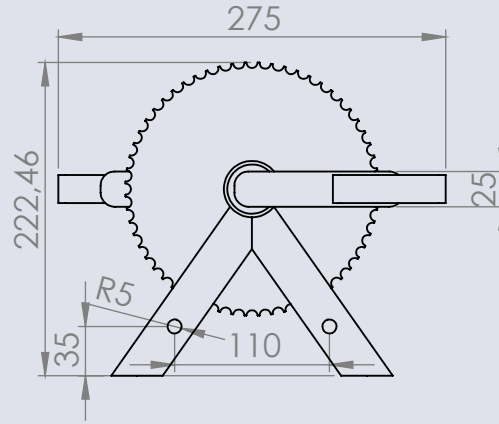
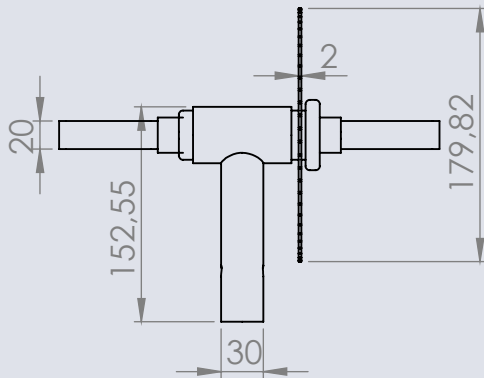
Side plate connection main box



Screws, Bolts and Nuts

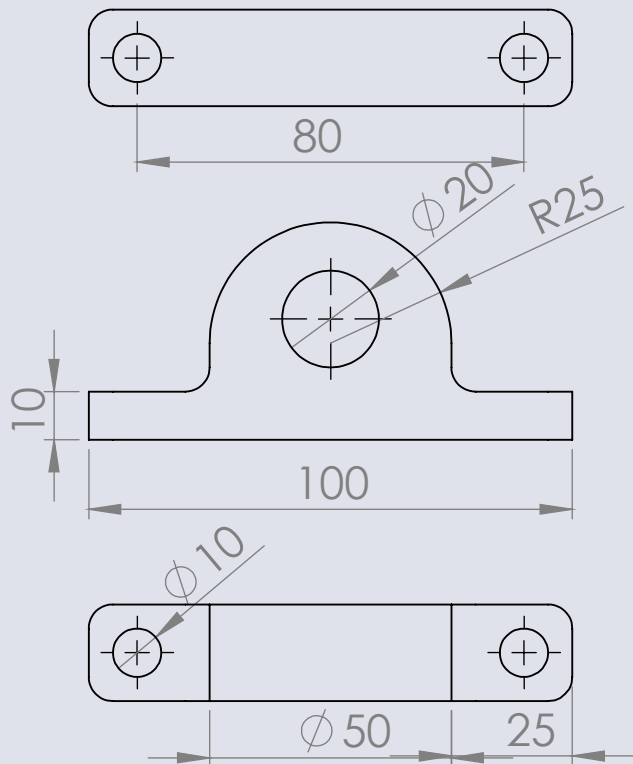


Bike crank

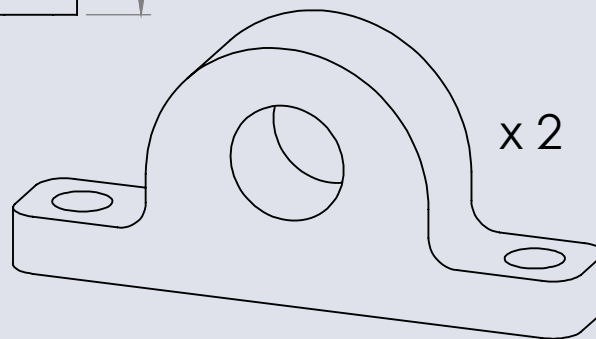


Aluminium bicycle crank
(€ 75,00 Ordered from ebay)

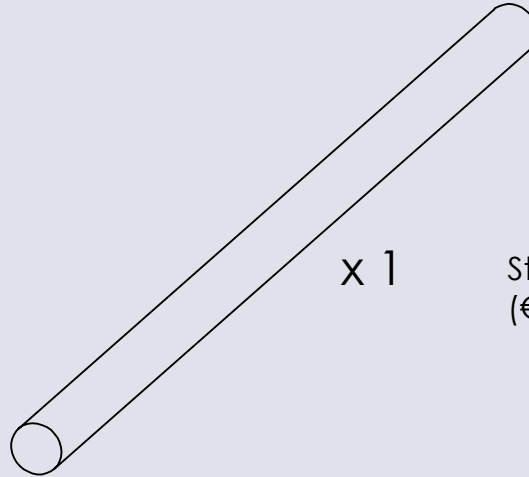
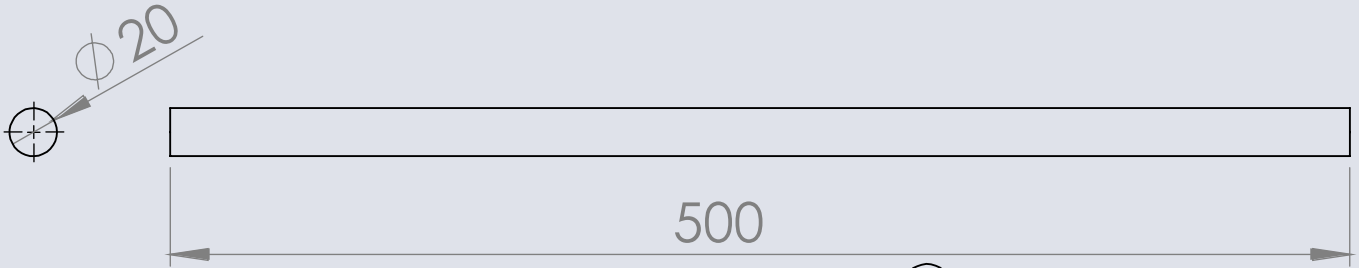
Pedestal bearing



Aluminium Pedestal Bearings
(€ 21,88 pp)



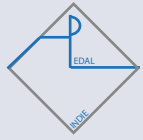
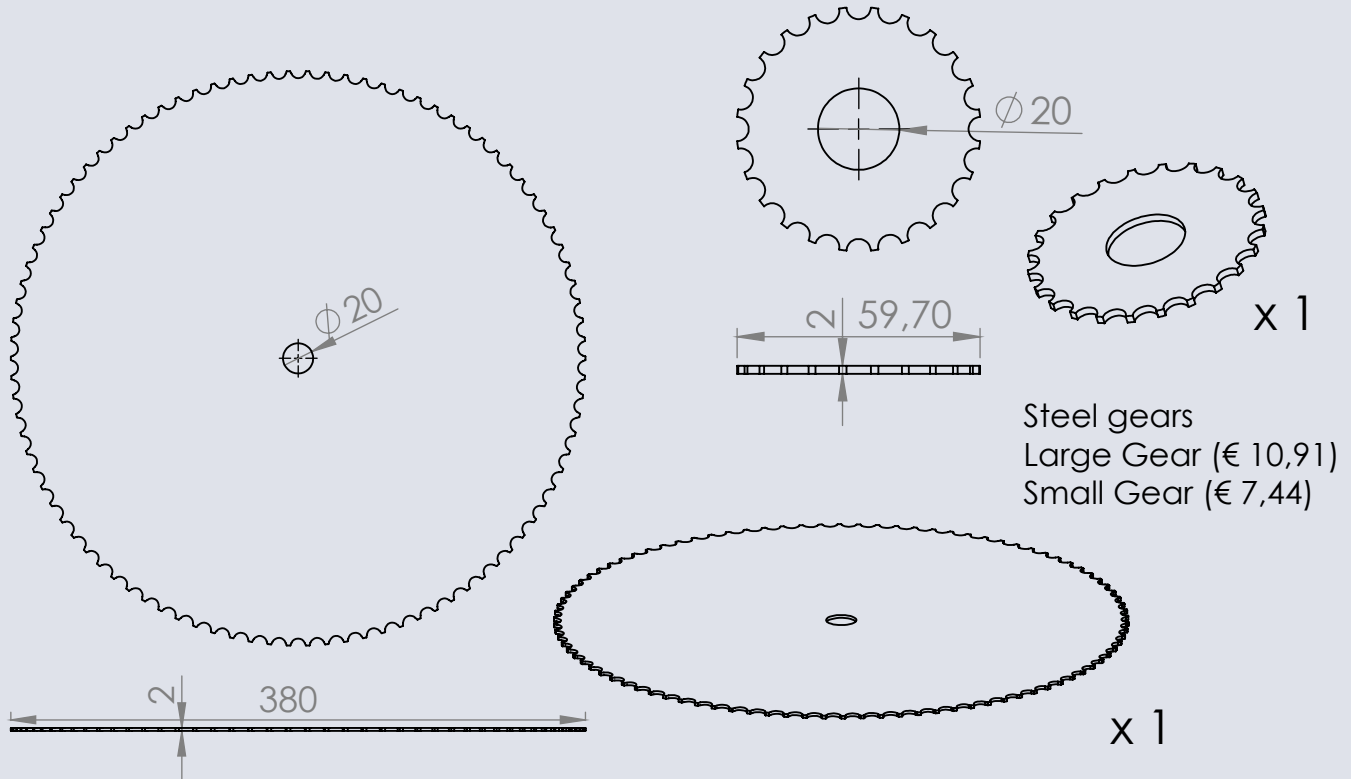
Axle



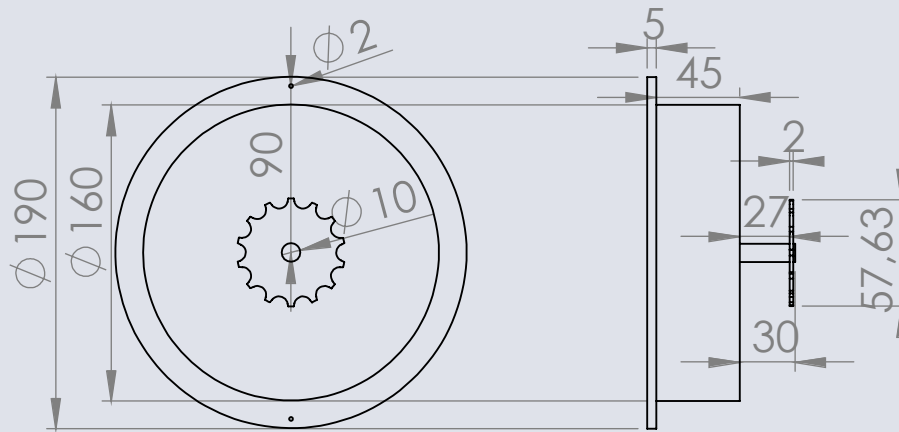
x 1

Steel Axle
(€ 10,00 / kg Total € 15,00)

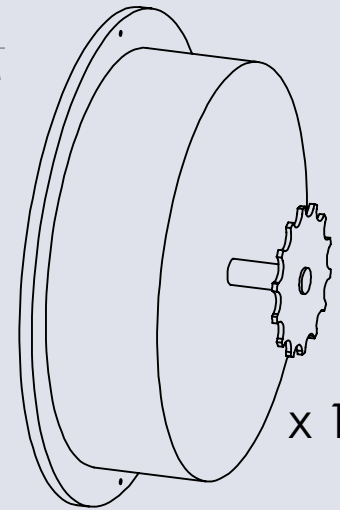
Gears



Generator

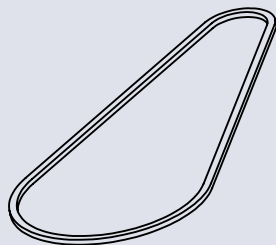
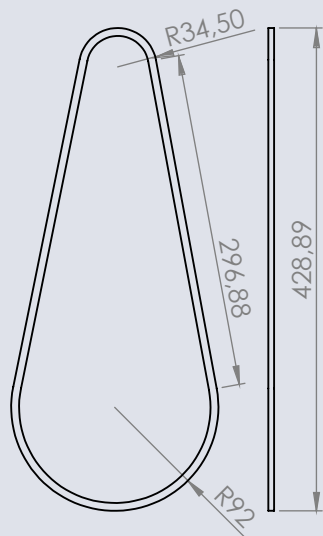


Low RPM Generator
Output – 15V/6.5A @ 800 rpm
(New - € 300 / Used - €200)

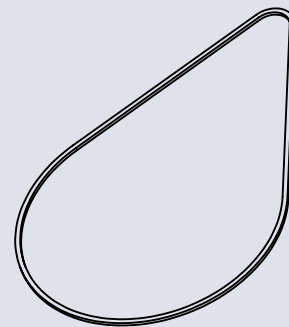
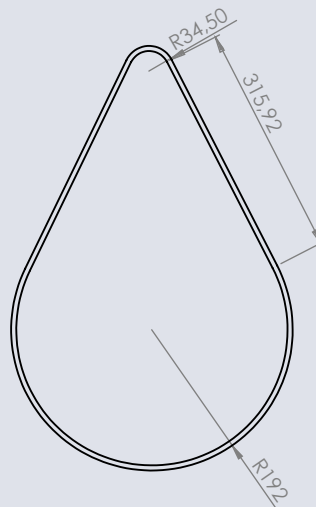


Chains

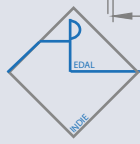
Bycicle chain (€ 10,00 pp)

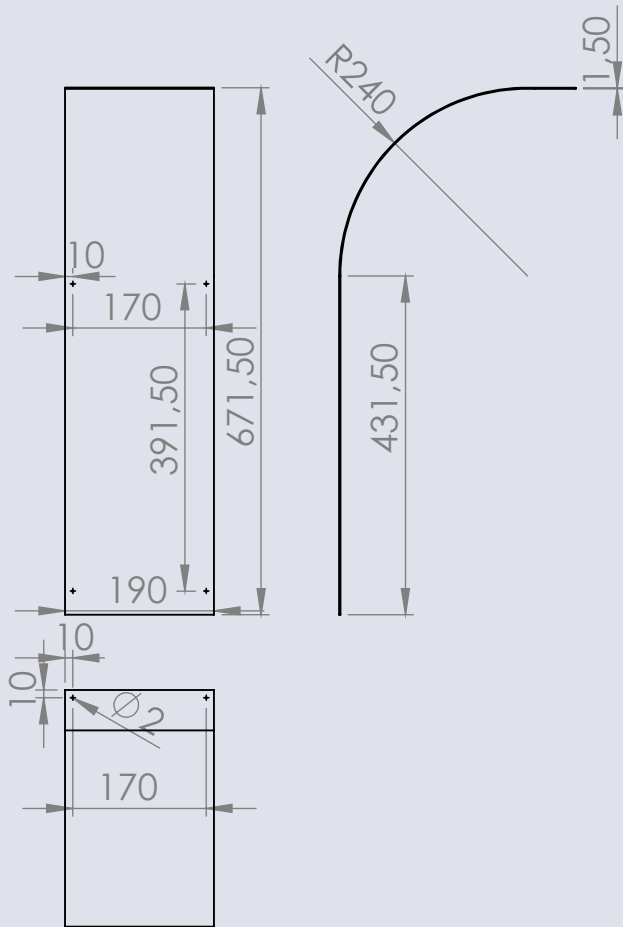


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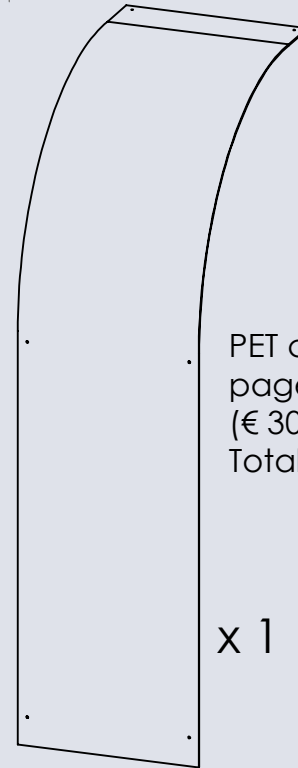


x 1





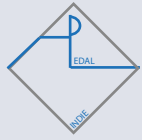
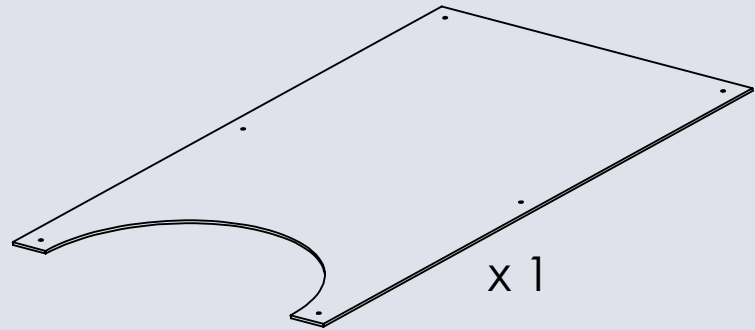
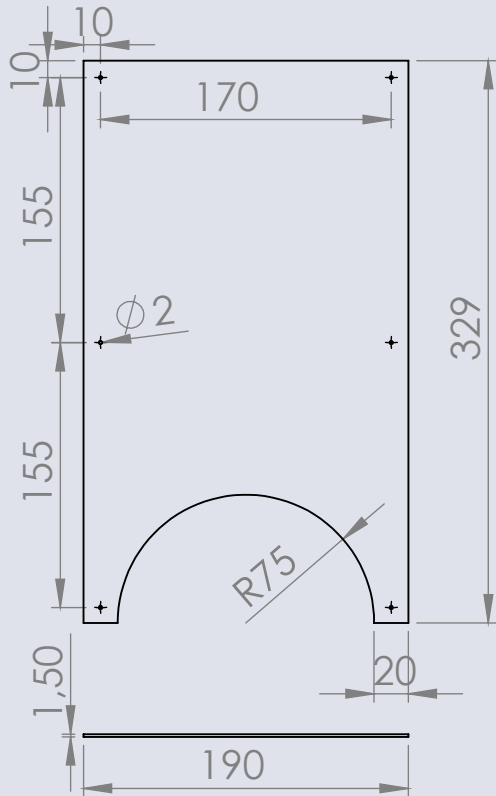
Back cover for main box



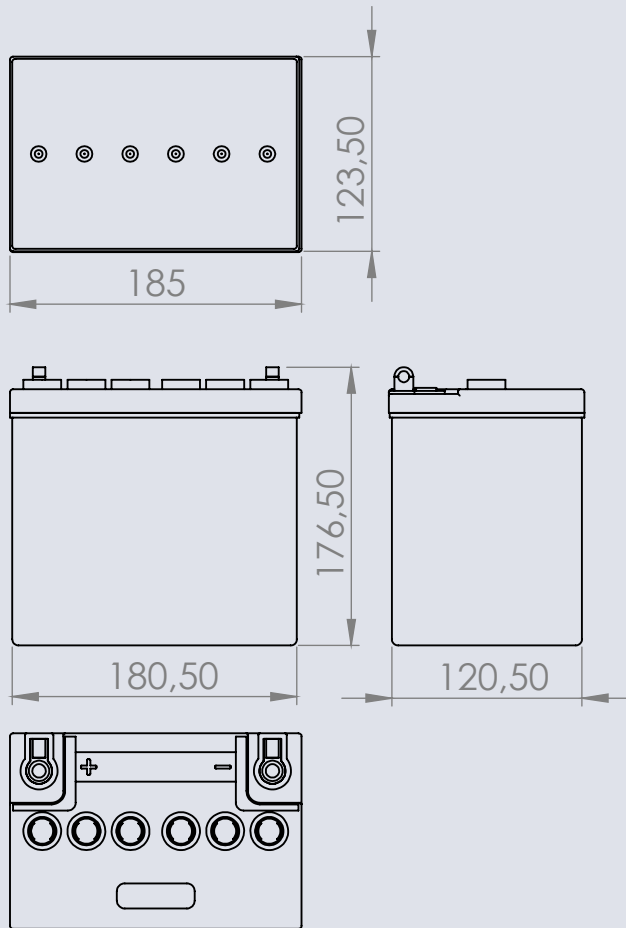
PET casings, also following
page -> front cover)
(€ 30,00/m²)
Total - € 12,92)

x 1

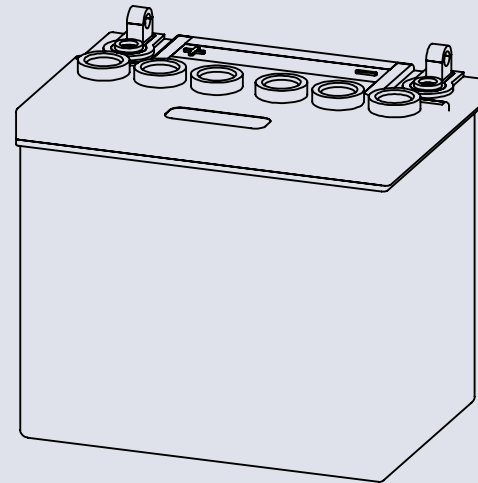
Front cover for main box



Car Battery



12 Volt / 45 Ampere-hour
(€ 49,90)



x 1

Assembly of Indiepedal

