

# Rubicon

**The tough (IP67), expandable, Crowd Supply teal case for your Raspberry Pi, Arduino, BeagleBone, or custom PCB project.**

Rubicon is a modular enclosure system specifically designed to help deploy and protect your projects in style. It is IP67 water- and dust-proof, supports glands and conduit fittings, and is designed to be installed just about anywhere.

Rubicon combines high quality, extreme durability, and superb flexibility – great for a wide range of indoor and outdoor applications such as sensors, IoT gateways, and controllers. Rubicon is ready to shield your Raspberry Pi, BeagleBone, Arduino, and other custom hardware from sun, rain, snow, and flood.

## What's New?

This crowdfunding campaign is for a limited, special edition run of the Rubicon IP67 project cases in Crowd Supply teal, and for a new addition to the Rubicon family line - a compatible, custom heatsink. This deluxe kit also contains both the shallow and deep cover depths in the Crowd Supply teal for even more configurability.

## *Crowd Supply Teal*



## *New RPi Heatsink*



## Features & Specifications

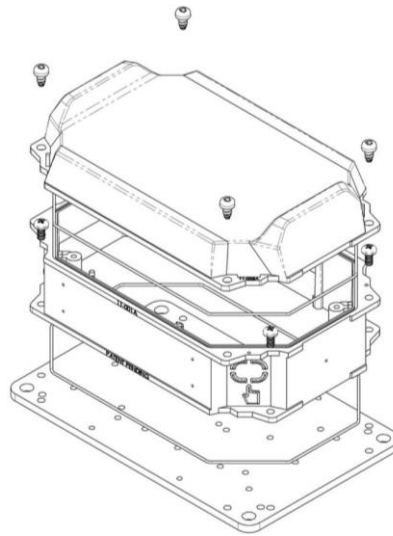
- **Exterior Dimensions**
  - **Deep cover w/ plate back:** 87.6 x 136.5 x 57.5 mm (3.45" x 5.38" x 2.26")
  - **Shallow cover w/ plate back:** 87.6 x 136.5 x 40.7 mm (3.45" x 5.38" x 1.76")
- **Color:** ~Pantone 3262 U (Crowd Supply teal)
- **Weight:** ~210 g (~0.46 lbs)
- **Resistance Rating:** IP67
- **Temperature Tolerance:** -40° C to 55° C (-40° F to 131° F)
- **Humidity Tolerance:** 0% to 100%
- **Waterproof:** Tested in 1 m (40") of water for 30 minutes
- **UV Resistant:** Yes
- **RoHS Compliant:** Yes

## Heatsink

The heatsink accessory kit provides the hardware necessary to mount a Raspberry Pi such that its processor is thermally tied to the base plate with a copper riser, which allows the heat to flow directly from the processor to the base plate of the Rubicon, and subsequently out of the enclosure. In outdoor tests comparing the temperatures of Rubicons with and without heatsinks (using a quad-core Pi 3 under full load), the heatsink reduced the processor temperatures by over 20° C.

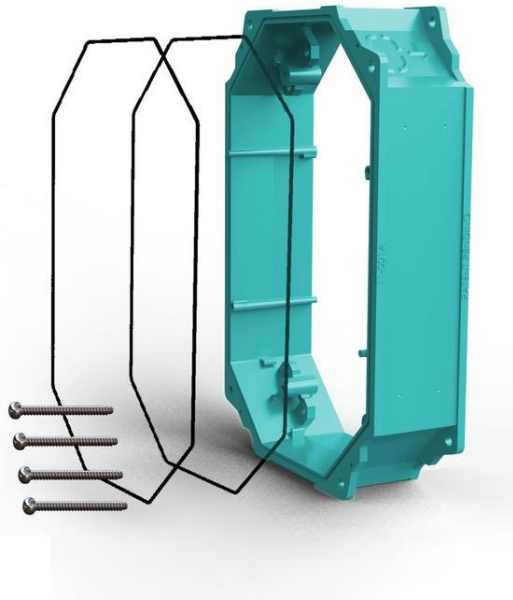
**Heatsink only intended for use with Pi Zero, Pi Zero W, and Pi 3 models A+, B+, B.**

## What's in the Kits



### *Rubicon Deluxe Kit: CS Teal*

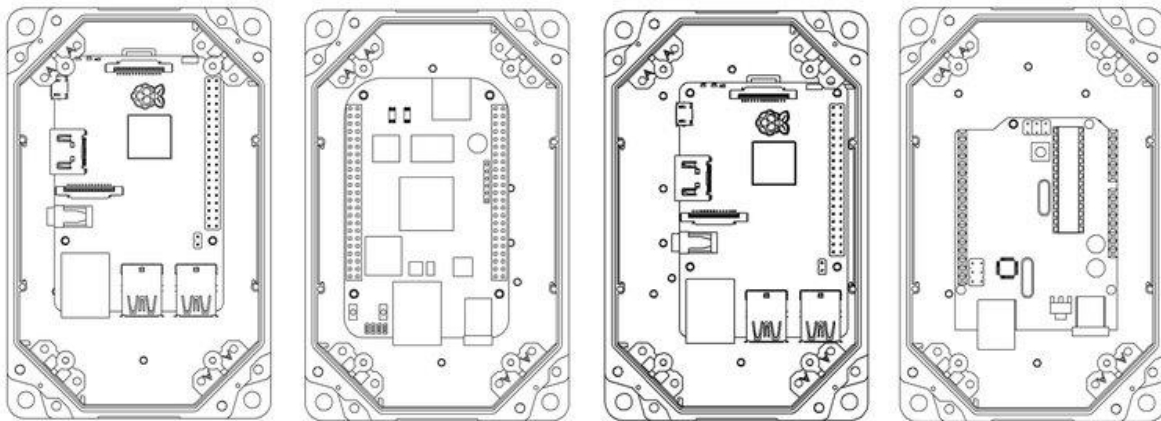
- 1 x Crowd Supply teal shell
- 1 x Crowd Supply teal shallow cover
- 1 x Crowd Supply teal deep cover
- 1 x Clear cover (choose shallow or deep cover when adding to cart)
- 1 x Base plate
- 1 x Gasket kit
- 1 x Stacking screws kit (M3x35, stainless steel)
- 1 x Board stacking standoff kit (4x M2.5 x 11 mm height x 6 mm thread - standard 0.435 in stacking height + screws and washers)
- 1 x Board mounting standoff kit (M2.5 x 7 mm height x 2 mm thread + screws and washers)
- 1 x Shell screw pack (12 screws: 4 x for mounting onto bosses, 8 x for covers, and 4 x for mounting onto the base plate)
- 1 x Heatsink kit (includes thermal pad & mounting screws)



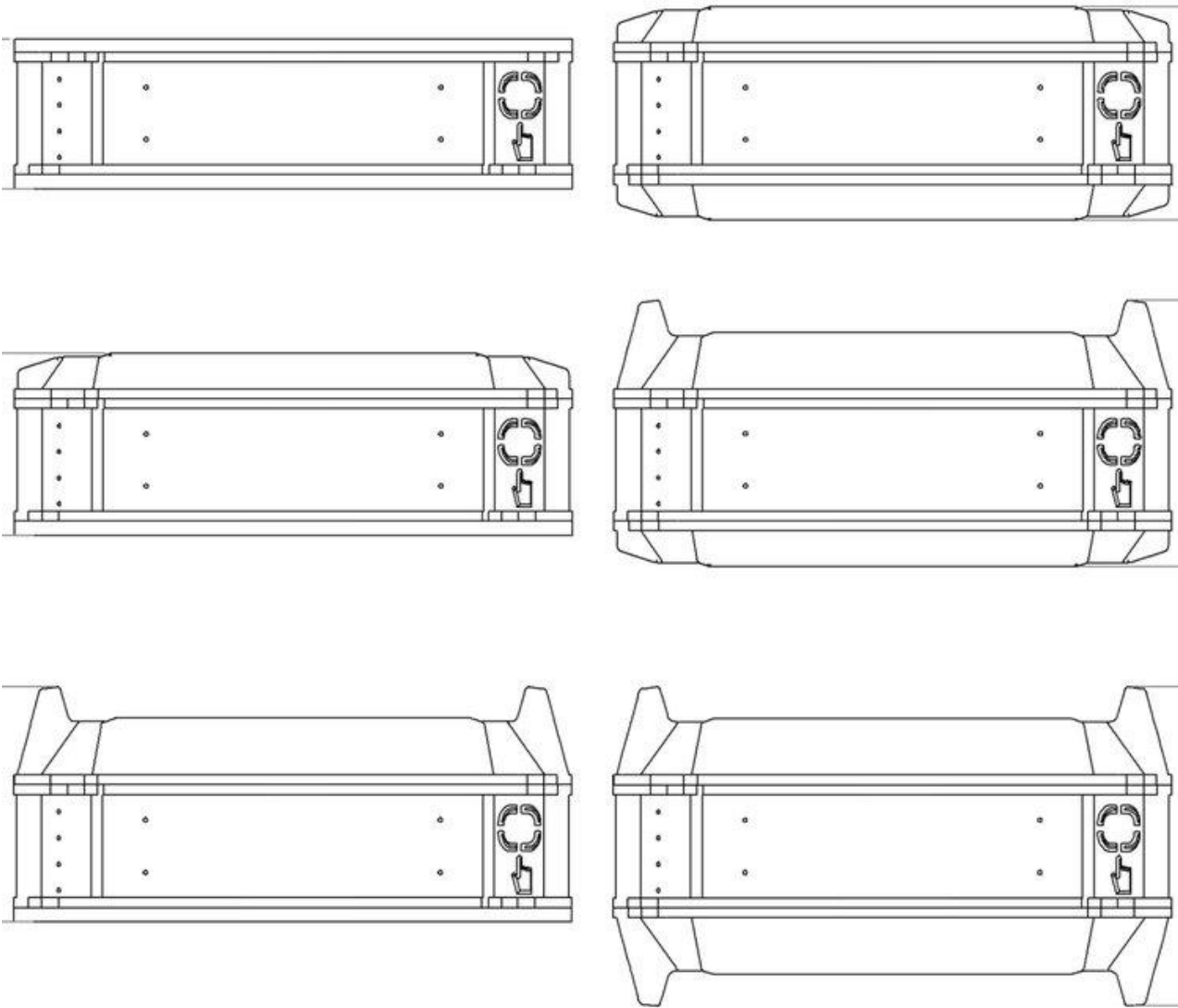
### *Rubicon Stacking Kit: CS Teal*

- 1 x Crowd Supply teal shell
- 1 x Gasket kit
- 1 x Stacking screws kit (M3x35, stainless steel)
- 1 x Shell screw pack (12 screws: 4 x for mounting onto bosses, 8 x for covers, and 4 x for mounting onto the base plate)

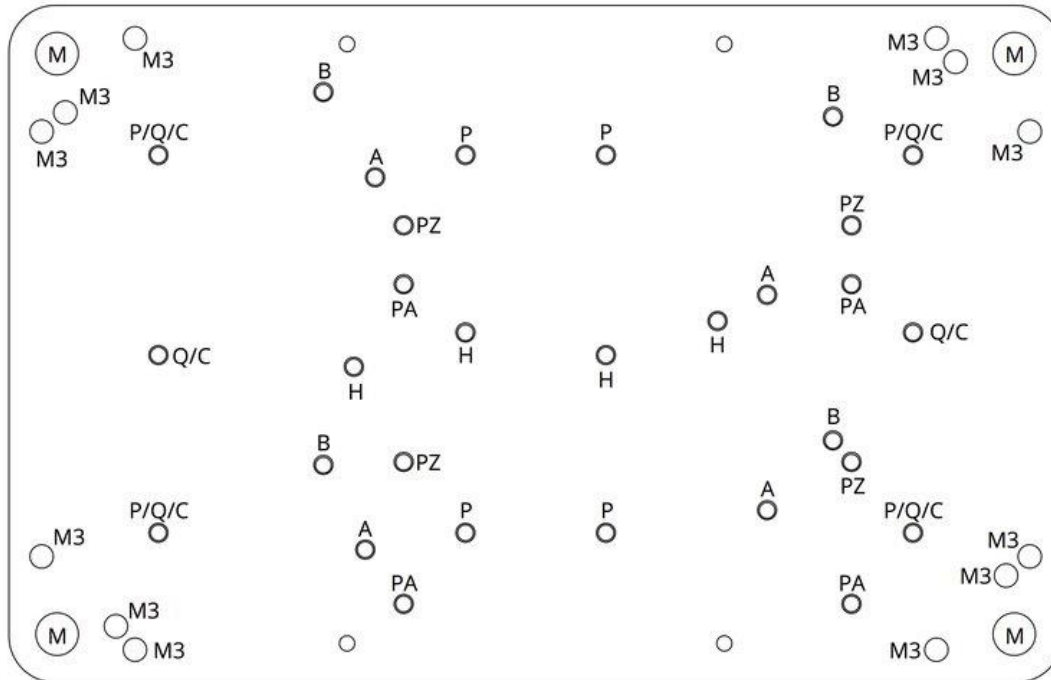
## Potential Configurations



*Various boards mounted in a Rubicon (left to right: Raspberry Pi 3, BeagleBoard, Raspberry Pi 3 in alternate position, Arduino Uno)*



*Mix and match kit pieces (some configurations shown require multiple kits).*



*Lots of mounting options on the plate.*

## Open Hardware

Rubicon has full [schematics](#) and [3D files](#) available, as well as a [quick start guide](#).

## Risks & Challenges

All the main components in the kits have already been mass-produced using injection-molding with an established provider, so having them made in Crowd Supply teal is very simple and low risk. We have working prototypes of the heatsink and are confident there is little risk in its production. That being said, the project is still susceptible to the slowdowns inherent in any manufacturing project, like material supply or manufacturer availability. Additional time has been added to the estimated delivery date to account for some setbacks, including if the manufacturer doesn't match the specified color in their first articles.