



December 10, 2018

# Specification – Performance, Dimensions, and Electronics

Hey there! We're still working on this page as part of our new site release. If you have any questions left unanswered please contact us at [support@swytchbike.com](mailto:support@swytchbike.com)!

## -Performance

The Swytch Kit performs at the same level as an eBike worth upwards of £2000! Allow us to elaborate:

### Battery Range

The ECO kit has a battery capacity of 5Ah (180Wh) and an expected range of 35 km on **medium power**

The PRO kit has a battery capacity of 7Ah (250Wh) and an expected range of 50 km on **medium power**

Motor Power and Top Speed

The Universal and Brompton Kits come with 250W front wheel motors, with top speeds limited to 15mph (UK/EU), and 20mph (US). This keeps your bike in the "pedelec" classification for each region, meaning you don't need any licencing to ride your eBike.

### Weight Bearing

The Swytch Motor Wheel is built stronger and tougher than a normal bicycle wheel, so unless you are exceeding 200kg of weight, you will not experience any problems. If you're worried about your bike's weight bearing ability, you may wish to purchase a torque arm accessory. Check out our "Accessories" entry in the tech blog for more info.

### Maximum Gradient

The Swytch Kit can handle a gradient of up to 32% (18 degrees) before experiencing problems. For context, that's just a bit steeper than the steepest street in San Francisco (Filbert Street)!

### Steering and Efficiency

You might think that the extra weight on the handlebars will affect your steering. We have designed the kit to be as light as possible and keep the feeling of riding your bike normal.

Jan Heine (Bicycle Quarterly) writes about handlebar-bags, frame geometries and aerodynamics.

Handlebar bags that weigh so little (3.5kg, the Swytch ECO weighs just 1.5kg!) have practically no effect on handling of high performance bikes – and handlebar bags are more beneficial in terms of aerodynamics than any other placement as they produce a forward point to the body.

### -Dimensions

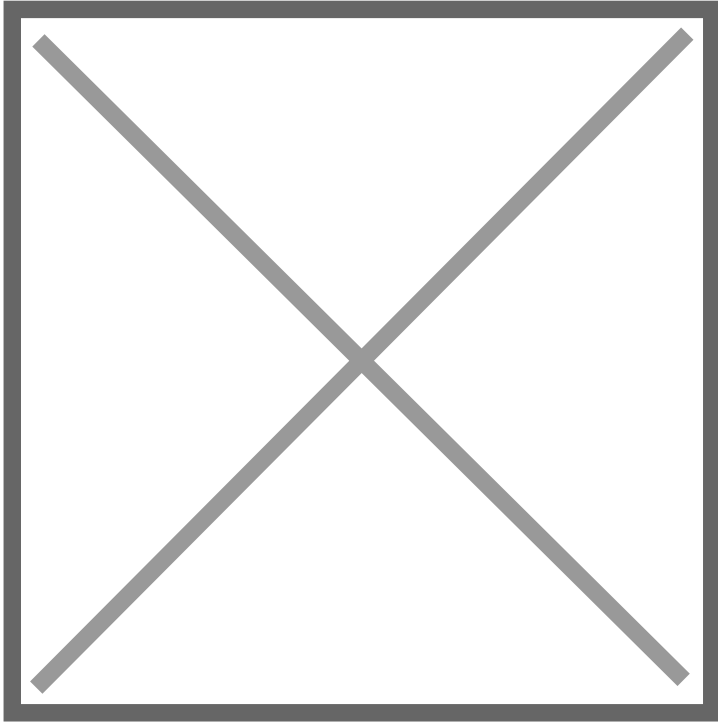
Our focus with the Swytch Bike was to make the whole system as light and easy to use as possible.

### Weight

These values are for the weight of the ENTIRE conversion kit - power pack, motor, wires and all.

### Dimensions

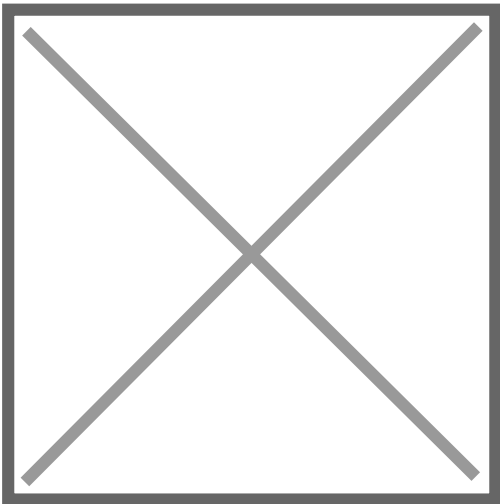
ECO and PRO are the same physical size



1st Gen & TOUR Kits

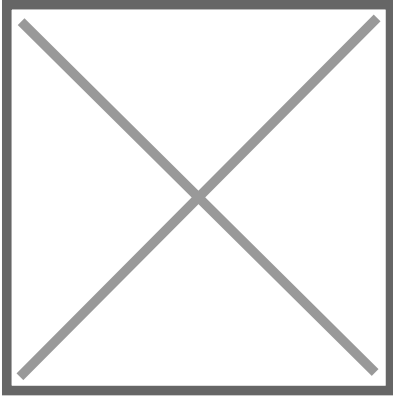
25 mile: 4.5 kg

50 mile: 5.5 kg



ECO & PRO

3.3kg



-Electrics

The Swytch Kit has a variety of intelligent electrical/electronic features. **Swytch Power Pack Functions**