

Freedom Ebikes Product Profile

Product Description

The Freedom Ebikes kit can convert most adult bicycles (including folding bikes) into an electric power assisted bicycle which will transform the way you travel.

Freedom Ebikes has a qualitative edge over the competition, with:

- a superior nanotechnology battery which is lighter, more powerful and recharges quicker than other electric bike batteries;
- a powerful, yet silent and light front hub motor;
- a kit design that is simpler to install, use and service than other electric bike kits

Product Options

- 80mm wide motor built in 16" wheel to suit Brompton folding bicycle
- 80mm wide motor built in 20" wheel to suit Dahon and other folding bicycles
- 100mm wide motor built in 26" wheel to suit mountain bikes
- 100mm wide motor built in 700C wheel to suit road and city bikes.

Technical Details

Motor type: 3 wire brushless DC (non Hall effect) with internal roller gear & freewheel

Motor location: front wheel hub

Motor voltage (nominal): 36 volts

Motor power: 200 watts nominal; 450+ watts peak

Motor peak torque: 20Nm

Motor weight: 80mm: 2.0kg; 100mm: 2.4kg

Maximum assisted speed: 25kmph

Battery type: 39.6 volt nanophosphate lithium ion (from A123 Systems)

Battery & controller location: inside front or frame mounted bike bag.

Battery capacity: 91-95 watt hours (between 2.3 & 2.4 Amp hours)

Battery weight: 976 grams (including plugs)

Battery power (discharge): 30C continuous = 70 Amps = 2,770 watts; pulse 60C

Battery charge time with supplied charger: 1 hour 20 minutes

Battery charge time with advanced charger: 45 minutes (standard) 15 minutes (quick)

Battery cycle life: 1000 cycles

Controller type: brushless DC motor controller (non-Hall Effect)

Controller weight: 212 grams (including plugs)

Controller peak power: 12 Amps

Throttle type: handgrip twist throttle

EU Standards Compliance: EN15194: 2009 E

Product Images

Kit Layout (16" wheel) showing connections



Fitted on 26" mountain bike with battery in frame mounted bag.



16" wheel fitted on Brompton folding bike



Fitted on 700C city bike with battery in front mounted bag

