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Best folding electric bikes: compact e-bikes tried and tested

We've tested bikes from Brompton, Carrera, Apollo and more on ride quality, portability and motor performance

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Sam – an e-science teacher – uses his physics degree and five years of experience at Which? to test everything from beard trimmers to electric bikes and trampolines.

The best folding electric bikes can be stored compactly in your home, motorhome or caravan. If they're light enough to carry on and off buses and trains, they'll take the strain out of your commute too.

We tested folding electric bikes from popular retailers including Brompton, Halfords, Carrera, Apollo and more, to find the best bikes from £700 upwards – two impressed us enough to get a Best Buy recommendation.

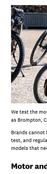
We checked to see how quickly you can pack them away and how compact and secure they are when folded. We also pushed the motors to their limits up a steep 25% gradient.

How our tests find you the best

- **Motor power**
  An e-bike that struggles up a hill is no good to anyone. We test using fixed gradient hills so you're not left making all the effort.
- **Folding and portability**
  Folding and squeezing your bike onto a busy train in rush hour is no mean feat. We rate every bike's portability, even cramming it into a tiny car boot.
- **Ride quality**
  We mimic different riding scenarios on different surfaces so we can tell you which bike is best for commuting or a weekend off-roading.
- **We also test...**
  How quickly and smoothly the bikes accelerate, braking distance, build quality, handling at low speeds and more.

The best folding electric bikes

Volt Metro folding electric bike



Available from Volt (crossbar frame) (£1,774) and Volt (step-through frame) (£1,774)

Most recently tested April 2023

Manufacturer's claimed range Up to 50 miles

Weight 22.4kg

Max load (rider + luggage) 100kg

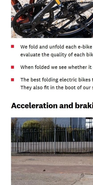
Motor SpinTech, rear hub

Battery sizes/claimed charging time 504Wh/3-4 hours

Size when folded HxWxD 84 x 76 x 46cm

Need to know SpinTech LCD display, four assistance levels with boost button, Shimano eight-speed gears with trigger shifter, hydraulic disc brakes, 20-inch wheels, front and rear lights, kickstand, rear luggage carrier (15kg max load), other colours available

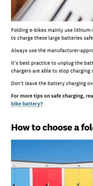
How we test folding electric bikes



We test the most popular folding e-bikes from key UK retailers and top brands such as Brompton, Carrera and Halfords.

Brands cannot buy their way into our testing. We pay for every folding e-bike we test, and regularly revisit the folding e-bikes on sale to see if there are more popular models that need testing. When we find them, we test them.

Motor and ride quality



- Our diverse panel of cyclists ride each bike and evaluate how smoothly it accelerates, how it responds to changes in how fast or hard you pedal, and how smoothly the power tapers off as you reach 15.5mph.
- They also evaluate each bike's display, motor controls, comfort (on and off-road), manoeuvrability and handling tight turns.
- We take each folding e-bike up Brooklands Museum's test hill – which has fixed gradients – to see how they handle shallow and steep inclines. The best can climb very steep 25% gradients, and some are even able to hill-start on them.

Folding and portability

- We fold and unfold each e-bike multiple times, timing how long it takes evaluate the quality of each bike's folding mechanism.
- When folded we see whether it can fit in a small 250-litre car boot
- The best folding electric bikes take less than 20 seconds to fold and unfold. They also fit in the boot of our small test car, with the boot shut.

Acceleration and braking

- We accelerate the bikes multiple times over a set distance to see which are the quickest.
- We repeatedly measure how far each bike travels when the brakes are applied at 15.5mph.
- Brakes can be adjusted, but our tests assess how good they are when you first get on the bike.

Ease of use and build quality

- Each bike is rated for how easy it is to lift and carry short distances and how easy the battery is to take out and put back in.
- We also carry out an overall quality assessment, rating for electrical cable management, comfort of handles and saddle materials and neatness of welding on the frames.

Why we don't test the range of folding electric bikes

- Factors such as rider weight, motor assistance level, weather, wind speed and road conditions all affect how much you'll get out of your e-bike on any given day.
- As such, there's no single value for the range of a folding e-bike that is accurate or useful for everyone.
- As a general rule of thumb, the bigger the battery, the further you'll go on a single charge.

We provide the manufacturers' claimed ranges:

- Some only give an 'up to' estimate. These are an absolute maximum and are usually based on ideal riding conditions.
- Some give a range of possible distances: the shorter range is closer to what you should expect out of the bike if you cycle in hilly areas or less ideal conditions.

Why you can trust us: at Which? we're free from manufacturer and retailer influence. Find out more about our impartiality and how your support helps us to stay editorially independent

How to charge an electric bike battery

Folding e-bikes mainly use lithium-ion batteries to power the motor. It's important to charge these large batteries safely to reduce fire risks.

Always use the manufacturer-approved charger and battery, don't go third-party.

It's best practice to unplug the battery when fully charged, although some smart chargers are able to stop charging once they detect the battery's full.

Don't leave the battery charging overnight.

For more tips on safe charging, read the full guide – How do you charge an electric bike battery?

How to choose a folding electric bike

When it comes to picking the best folding electric bike for you, the key considerations are similar to when buying a regular electric bike. Read our advice on how to buy the best electric bike for more.

However, there are a few extra things to consider with folding e-bikes.

What will you be using the folding e-bike for?

All the folding e-bikes we've tested save space, so they are good if space is tight or you're transporting the bike in cars and caravans.

But there was only one folding e-bike, in our opinion, that's easy enough to move when folded to be taken on public transport. Log in or join Which? to instantly reveal.

Will you be moving the e-bike around when folded?

Most folding e-bikes fold in the same way, but we found some scuffed the paintwork when the handlebars folded down, required pedals to be in certain positions for unfolding), or even struggled to stand upright when folded.

One e-bike bucked this trend, and another has a unique way of folding that we found made it the best for carrying when folded. Log in or join Which? to instantly reveal.

Is it easy to buy replacement parts?

Battery capacity reduces over time, brakes wear down and tyres may puncture. If you want your e-bike to stay in tip-top condition, it's important to check that you can buy replacement parts easily.

What's the disadvantage of folding e-bikes?

Whether it's for storing away, transporting in a car or motorhome, or when nipping on and off public transport, the appeal of a folding electric bike is that you can fold it down to take up less space when you're not using it.

But if being able to do that isn't an important factor for you, then we recommend going for a standard e-bike.

Our years of testing folding e-bikes have found that you can usually get more for your money (for example a better motor and components) with a regular e-bike.

See our round-up of the best electric bikes.

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