

Engwe P20 folding e-bike review: \$1000 buys a lot of forgiveness

It's easy to make a folding e-bike like the Engwe P20 look great on paper.

First, you price it near \$1,000 and promise a 10-second folding time. Then, you replace the traditional oily chain, derailleur, cassette, and shifter with a belt-driven motor and torque sensor that should intuitively ramp up the pedal-assisted power without requiring any gears or maintenance. Finally, you add hydraulic disc brakes to bring everything to a controlled stop and wrap it all up in a nice-looking package that can be carried onto a train or tossed into the trunk of a car.

On paper, then, the €1,099 (about \$1,190) Engwe P20 ticks all the boxes for an e-bike that recently went on sale in Europe. Riding it for the last month at my home in Amsterdam, however, makes it clear that you still get what you pay for.

6Verge Score

Engwe P20

\$ 1190

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The Bad

- Poorly tuned torque sensor
- Pedaling above 23km/h gets uncomfortable
- Heavy for a foldable
- Europe-only for now

How we rate and review products

The P20's price and feature set makes its faults mostly forgivable, but they are faults nonetheless.

My first issue with the P20 is with the tuning of the torque sensor. There's a noticeable delay in the pedal assist delivered by the P20's "Talengo JKaero" belt drive when coming off the line. Trying to start on an incline is even worse, requiring a few seconds of fairly significant effort from the rider. And since it's a single-speed bike, you can't switch gears for relief.

Perhaps this tuning is on purpose since the unbranded 250W rear-hub motor is only capable of 42Nm of torque. It wouldn't be the first e-bike that shifts the burden to the rider's quadriceps instead of the motor (and battery) in favor of eking out a bit more range per charge. The P20 is not the bike to own if you need to regularly climb hilly terrain, but it handles moderate slopes fine.

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motor is fine and the unbranded brakes are reliable.*

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dark:[>a]:shadow-underline-gray-63">*The front and rear lights
are integrated and included in the price.*

My second issue makes itself known after getting the P20 up to speed. At about 23km/h (14mph), my legs started spinning so quickly that the saddle began to feel uncomfortable. That upper limit is fine if you're good with rolling along at a casual pace but annoying if you need to get anywhere at the P20's 25km/h (15.5mph) top speed, per European limits.

And like nearly all mail-order e-bikes, you can unlock the motor for even more speed if you know the trick – which I did for this review. Not surprisingly, I found pedaling at US speeds of 20mph (32km/h) to be impossible. Fortunately, my review model shipped with a throttle lever despite being a no-no in much of Europe. It was disabled in the software but can also be unlocked with some Konami code magic. Annoyingly, even the P20's throttle suffers from a delay.

I pedal along at 23km/h, hit the throttle to stop the windmilling and... the motor cuts out, resuming after a second or two once the throttle finally engages. It does eventually get the bike up to 32km/h – and beyond, if you dare.

These performance quirks would be unforgivable for an e-bike in the \$3,000-plus range that I usually review – but the Engwe P20 costs just a third of that. And there are plenty of things to like here.

There are plenty of things to like here

The P20's hydraulic disc brakes bring those 20 x 1.95-inch tires to a stop quickly and under control. Just note that the brakes are unbranded, which could cause issues finding replacement brake pads when the time comes.

The P20's geometry also rides larger than its size, so the steering doesn't feel overly twitchy like some smaller foldable bikes. It's heavy for a foldable with 20-inch tires, coming in at 18.5kg (41 pounds) or 22kg (55 pounds) when slotting in that removable (and lockable) 346Wh (36V / 9.6A) battery. But that added heft helps the ride feel a bit more secure at the expense of portability.

The range is decent, though heavy use of the throttle will diminish it considerably. When only using the motor as a pedal assist, I was getting about 52km (32 miles) from a full battery when riding in power levels two or three (out of three). Not bad. The battery takes over five hours to charge.

Engwe calls the P20 a 10-second folder, which is certainly ambitious – my best time was about twice that, but you might fare better with lots of practice. The handlebars and seat can both be dropped with quick-release latches, and even the pedals fold with some effort. The bike then folds in half along what feels like a reassuringly strong latch found midway along the center tube.

A magnet helps keep the front and rear wheels attached when folded, allowing you to push or pull the unwieldy package if you balance it on one wheel while holding the seat with two hands. It takes some practice and strength to get right. A tiny integrated metal stand lets the bike rest on the ground in the upright position without toppling over too easily.

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dark: [>a: hover]: text-gray-e9 dark: [>a: hover]: shadow-
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looking foldables.

The P20 also comes with lots of extras baked into the price, including integrated fenders, a rear rack, a kickstand, and

front and rear lights (with useful brake light), which are all required by most city commuters. It also has a turn signal feature with dedicated buttons on the handlebar. Using them is tricky since they don't make a sound, don't automatically turn off, and aren't very visible during the day. You're better off using hand signals, in my opinion.

There's no app, the display is tiny but fine, and the whole bike can withstand rain and jets of water while riding. You'd think an IP6 rating would be standard for all e-bikes meant to be ridden outdoors, but it's not guaranteed at this price range.

What frustrates me about the P20 is that it could be a great e-bike but instead feels like it was developed by a marketing team using available parts picked from a catalog, without anyone taking the time to optimize the riding experience. But that's what you get at the budget end of the e-bike spectrum.

For €1,099 / £1,099, the Engwe P20 is a decent choice for anyone who needs a relatively inexpensive e-bike as part of a multimodal commute or is looking for a foldable that rides more like a traditional bike.

Photography by Thomas Ricker / The Verge

<https://www.theverge.com/24194819/engwe-p20-folding-e-bike-review-price-range-features>