



## **Electric Bikes 101: Everything You Need to Know About E-Bikes**

Get an extra boost of adventure by selecting the right electric bike for your cycling needs.

Whether you're an avid biker or just looking for an easier, more sustainable commute, electric bikes offer benefits for every lifestyle. At first glance, choosing an electric bike model can seem overwhelming. There are multiples classes, different devices to power the vehicle and an assortment of accessories to customize the bike depending on the type of riding you're interested in.

We'll walk you through the types of electric bikes, so you can pick out a suitable style to help you go further, faster, easier.

### Types of Electric Bikes

Electric bikes are available in three different classifications, ranging from Class 1 to Class 3.

Understanding electronic bike classes helps you to align your riding skill and comply with local legal restrictions. All electric bike classes are defined by their max speed and electric power component.

- Class 1: Tops out at 20 mph and uses pedal-assist technology to power the bike.
- Class 2: Also tops out at 20 mph but uses a throttle to control the amount of electric output the bike produces.
- Class 3: Produces speed up to 28 mph, utilizing pedal assist technology only. Class 3 electric bikes are illegal in many states so verify your local policies before purchasing.

In addition to state or locality regulations, be aware of parks and public land rules regarding electric bikes. Park regulations vary by state, so it is always recommended to research before you ride.

### Pedal-Assist vs. Throttle-Powered Electric Bikes

Pedal-assist technology operates exactly like it sounds. An electric bike powered by pedal assist will still require the rider to pedal, just at a reduced rate compared to a regular bike. This type of electric bike is perfect for a rider who enjoys the feeling of riding a regular bike but wants an added boost for time-sensitive trips or longer, more rigorous rides. Most models are equipped with a setting that allows you to change the amount of help you receive while pedaling. From ride to ride, you can customize the amount of assistance desired.

Much like a motorcycle, an electric bike equipped with a throttle will do the heavy work for you. Typically, the throttle will be mounted on the handlebar and can be activated by twisting or a lever. The

main difference with a throttle-powered electric bike is that the rider doesn't have to pedal the bike at all to get moving. Throttle e-bikes offer the ability to climb a hill without pedaling, for example.

Electric bikes can also operate without any motor assistance, just like a pedal-only bike.

### Understanding E-Bike Motors

A common misconception is the bigger the motor, the more powerful the bike. While in theory a bigger motor should be able to produce more power, the largest motor legally allowed is 750 watts. Usually, if an electric bike is equipped with a 750W motor, it's because the design is much heavier and requires the added power to offset its weight — not to deliver the fastest bike on the market.

Instead of looking at a bike's motor size, we recommend exploring these factors to help drive your decision:

- Range – How many miles per charge
- Charging Time
- Max Speed
- Power Modes – Will vary by brand; typically, this range includes Eco, Active, Sport, Power or Turbo, in order from lowest or slowest setting to the highest or fastest setting
- Throttle or Pedal Assist

### Electric Bike vs. Regular Bike

Why choose an electric bike over a traditional bicycle? The choice is up to the rider and the type of riding experience they are looking for. However, one common misconception is that electric bikes are only for riders looking for a shortcut. In truth, electric bikes can provide benefits to many different types of riders and scenarios, such as extra help while exploring on a windy day or riding on a hilly route. An e-bike is the great equalizer in cycling, allowing everyone from beginners to enthusiasts to go further and go faster while still experiencing the joys of riding a bike.

Most regular bike accessories work seamlessly with electric bikes. Electric bikes can be equipped with lights, kickstands and more. There are also additional accessories that will help you get the most out of your electric bike experience, like a carrier rack for easy transportation. As when riding any bike, it's critical to follow safety procedures and always wear a helmet.

Now that you're equipped with knowledge on electric bike styles, how they work and the benefits of owning an e-bike, you're well on your way to finding the perfect match for you. Overall, both electric bikes and regular bikes offer benefits. Take your lifestyle and expected use of the bike into consideration of your decision.