



Charging at home



How long to charge your e:Ny1?

No need to charge fully every time – just enough to comfortably get you to where you want to be. It's good for battery life too.

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**Time to charge =
battery size ÷ charging speed**

The time it takes to charge an EV depends upon the size of the battery and the speed of the charger.

Here's the calculation for your e:Ny1:

- + The e:Ny1 has a 68.8 kWh battery
- + The e:Ny1 has two onboard chargers, both of which are 11 kW
- + Time to charge = $68.8 \div 11 = 6.25$ hrs (6 hrs 15 mins)

You don't have to charge fully every time. Charging to the level that will comfortably get you to where you want to be extends the life of your battery. Our e:Progress home-charging solution (see *Honda EV Driver Tips 2.0*) will charge your e:Ny1 to whatever level you choose.



Typical charging times

Normal charging – about six hours

At a domestic or public AC charging station, using the e:Ny1's 11 kW charger, it takes about six hours to charge the 68.8 kWh battery from 10% to an 80% charge.

Fast charging – about 45 minutes

At a 100 kW public charging station, using the e:Ny1's fast-charge, CCS port, you can achieve a 60-mile top-up charge in just 11 minutes or increase the battery level from 10% to 80% in about 45 minutes.

Most drivers pull in for a quick top-up charge instead of waiting around to fully charge their battery.

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Factors that affect charging speed

Battery size: The bigger the battery, the longer it takes. Your e:Ny1 has a 68.8 kWh battery.

Current charge level: Charging an empty battery takes longer than topping up a battery that's already 50% charged.

Maximum charging rate of car: You cannot charge your battery faster than your car's maximum charging rate, which in turn depends on the type of current you're using.

Charging from an AC supply: The rate for the e:Ny1's onboard converter is 11 kW, which is the speed you get even if you stop at a 22 kW charging point.

Charging from a DC supply: You can speed things up at a fast-charging station with a DC current by plugging into the e:Ny1's fast-charge CCS (combined charging system) port, which has a maximum charging rate of 78 kW.

Maximum charging rate of charging point: You're also limited by the speed of your charging point. If it's a 7 kW charging point, that is your maximum charging speed.

The weather: On a cold day, it takes slightly longer to charge your e:Ny1, especially when using a rapid charger. Cold weather also reduces the efficiency of your e:Ny1. You add fewer miles of range for the time you spend charging.



Charge your e:Ny1 as often as you like

You can charge your e:Ny1 at home as often as you like. Treat it the way you treat your mobile phone, charging overnight to 80% (the recommended level for an EV battery) and topping up during the day as needed.

Even though few drivers need to charge their car every day, many drivers make a habit of plugging in each time they leave their car. Frequent top-ups give them maximum flexibility for unexpected journeys.





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Types of chargers

There are three types of charger:

+ **Slow**

+ **Fast**

+ **Rapid***

Slow and fast chargers are usually found in homes and on-street charging posts.

Rapid and ultra-rapid chargers are found at service stations or dedicated charging hubs.

Slow chargers run at speeds of up to 6 kW AC, and can take up to 12 hours to recharge an EV battery. Slow chargers include the three-pin 3 kW charging points found on lamp posts in residential streets. Avoid plugging a three-pin charger into an extension lead. If an extension is unavoidable, always use a heavy-duty 13A extension cable.

Fast chargers run at speeds from 7 kW to 22 kW AC, and are the most common type of home charging point. A 7 kW fast charger will fill an EV battery in six to eight hours.

Rapid and ultra-rapid chargers run at speeds of 100 kW DC or more. Note that the maximum charging speed of an e:Ny1 is 78 kW. No matter what charger you use, you cannot charge your e:Ny1 faster than 78 kW.

Onboard chargers are the chargers that come with your car. They convert AC current to DC. The e:Ny1's onboard chargers run at 11 kW, which is the maximum rate at which they can take an AC charge. Even if you connect to a 22 kW AC charging point, your e:Ny1 will not charge faster than 11 kW.



Chargers can also be:

+ **Tethered**

+ **Non-tethered**

A tethered charger has its own built-in cable. It's a bit like the fuel pipe on a petrol pump.

A non-tethered charger has no cable. You have to use your own cable that you carry with you in your car.

* The fastest rapid chargers [350 kW] are sometimes described as ultra-rapid chargers.