GREEN ENERGY CONSUMERS ALLIANCE

DC fast charging can enable long distance travel in an electric vehicle. However, the wide variety of fast charging stations and vehicle models can make it difficult to predict how quickly a particular car will charge at a particular station. The tables below can help you better understand what to expect.

Fast charging station power	Estimated* miles gained in 30 minutes of charging
25 kW	45 miles
50 kW	90 miles
100 kW	166 miles
150 kW	200 miles

Generalized DC fast charging speed by station power

*This table is an estimate based on generalized conditions. Actual charging times will vary according to temperature, vehicle state of charge, battery size, vehicle model, and station power.

DC fast charging speed by vehicle

The first 30 minutes of a fast-charging station generally add the most miles. Charging rate slows down significantly as the vehicle approaches 80% state of charge. The chart below estimates how long it takes each EV model to charge to 80% and how many miles that translates to for each vehicle.

EV model	Driving range	0-80% DCFC speed according to manufacturer	Max power*
Nissan LEAF	150 miles	120 miles in 40 minutes	50 kW
Nissan LEAF Plus	222 miles	180 miles in 45 minutes	100 kW
Chevrolet Bolt	259 miles	207 miles in 70 minutes	55 kW
Kia Niro EV	239 miles	191 miles in 54 minutes	77 kW
Hyundai Kona EV	258 miles	206 miles in 54 minutes	77 kW

*Max power refers to the fastest charging power (measured in kilowatts) the vehicle can accept during a DC fast charging session. A Nissan LEAF plugged into a 25-kW station will charge 45 miles in 30 minutes (according to the first table) but charge 120 miles in 40 minutes if plugged into a 50-kW station.