

# What Are The Different Levels Of Electric Vehicle Charging?

We've been refueling our cars with gasoline for more than a hundred years. There's a few variants to choose from: regular, mid-grade or premium gasoline, or diesel. The refueling process is relatively straightforward, everybody understands how it's done, and it's completed in about five minutes.

However, with electric vehicles, refueling—the recharging process— isn't quite as simple, or as quick. There's a number of reasons why that's so, such as the fact that every electric vehicle can accept different amounts of power. There are also different types of connectors used, but most importantly, there are different levels of EV charging that determine how long it takes to charge an EV.

There are three levels of EV charging; Level 1, Level 2, and Level 3. Level 3 is broken into DC Fast Charging and (Tesla) Supercharging. The higher the level of charging, the faster the charging process, as more power is delivered to the vehicle. It's important to note that different EVs charge at different speeds on each level, because each EV can accept different levels of power from the EVSE, industry-speak for electric vehicle supply equipment, the charger.

The car always determines how much power it accepts, so there's no need to worry about plugging into a charging station that can deliver more power than your EV can handle. The car will not allow the charger to deliver too much power.

Level 1 Charging: 120-Volt

Connectors Used: J1772, Tesla  
Charging Speed: 3 to 5 Miles Per Hour  
Locations: Home, Workplace & Public

Level 2 Charging: 208-Volt to 240-Volt

Connectors Used: J1772, Tesla  
Charging Speed: 12 to 80 Miles Per Hour  
Locations: Home, Workplace & Public

Level 3 Charging: 400-Volt to 900-Volt (DC Fast Charge & Supercharging)

Connectors Used: Combined Charging System (Combo), CHAdeMO & Tesla  
Charging Speed: 3 to 20 Miles Per Minute  
Locations: Public



**Energy Options**  
EV Charging, Electrical Generation,  
and Storage



AC LEVEL  
**ONE**  
SLOW

**CHARGE TIME:**  
3-5 Miles of Range Per Hour

AC LEVEL  
**TWO**  
FASTER

**CHARGE TIME:**  
10-20 Miles of Range  
Per Hour

DC  
**FAST  
CHARGE**  
FASTEST

**CHARGE TIME:**  
80% Charge in  
20-30 Minutes