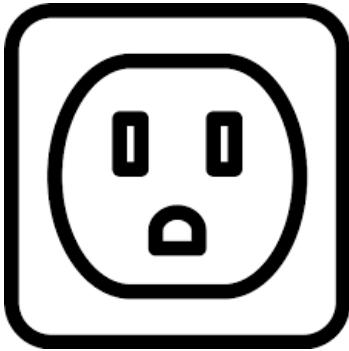


Charging - in a perfect world on the top - more like reality below

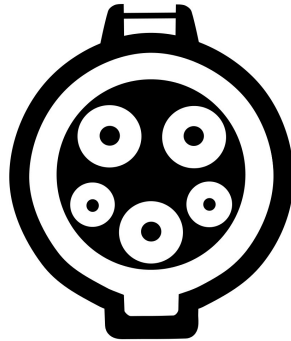
Level one (AC)
yes its a standard 110 outlet

1.3 kw (kilowatt)
10 hours (a good night sleep)
13 kWh or 40 miles



Level 2 (AC)
uses a 220 volt connection

6.6 kw (some are higher)
10 hours
66 kWh or 200 miles



DC Fast Charge (not AC)
sometimes called Level 3
Close to a gas station.
Most 150 kw
More than 100mi in 15 min
10. Hr -comparison N/A



Since fees are hard to collect for level 1 - often free. Bad news - slow and you have to bring your home charger with you. With no fees collected, some locations will be poorly maintained.

The usual rate is \$.21/kWh. Mostly, you will find a charger that is 6.6 kw. The charger may or may not tell you. Some charging stations that can do two cars at a time can give 6.6 kw to each - some share power and give 3.3 kw to each car.

The usual rate is \$.43/ kWh
Charging speed will vary from car to car. (a few)
Ford Mach E 115 kw
VW ID.4 120kw
BMW i3 50 kw
Porsche Taycan 400kw
Don't worry - your car knows and tells the charger what to give.
Also with all cars - the charging speed slows as the battery fills to avoid damage to battery and extend battery life.

Considering that most EVs use about 33 kWh to go 100 miles at Interstate speeds and no-one will drain a battery to zero. An EV with a 77 kWh battery will allow you to drive a little more than 2 hours at interstate speeds. (Based on 75% of battery used)
After two hours, most of us would appreciate a break for a rest room and a snack. At a DCFC location you could be back on the road in less than a half hour. In two hours both Chicago and ST Louis can be easily reached from CU

How do drivers find them ?

Newer cars include them on the navigation systems.

For myself, I like to look for chargers in the comfort of my home or at a restaurant or coffee shop.
Phone Apps. Plugshare finds the most. Chargepoint. ElectrifyAmerica, EVgo, Blink, Supercharger (Tesla), etc. If there is a charging service you like - there is probably an app.